ARTS AND SCIENCES COURSE DESCRIPTIONS:

Arts and Sciences courses are open for enrollment to all students who have been admitted to any program of study at Our Lady of the Lake College. Professional program courses are restricted to students who have been admitted to the specific degree or certificate program or who have special permission from the Dean, Arts and Sciences.

ACADEMIC SEMINAR (ACSM) 100

This course is designed to assist the student in achieving educational goals. A variety of skills relating to classroom and individual study at the college level are presented. These skills include: note taking, test taking, time management and stress reduction. Skills in the utilization of library facilities, the College's Learning Resources Center and computers are also introduced. Students enrolling in ACSM 100 are required to attend *New Student Orientation* which is held during the first week of classes in the fall and spring semesters and the first week of class during the Summer semester. Any student who does NOT satisfactorily complete ACSM 100 (with a grade of "C" or better) must repeat the course during the next semester of enrollment. The student will be allowed to take other course work only after securing the permission of the Dean, Arts & Sciences.
CREDIT HOURS: 1
PREREQUISITES: For all new students, ACSM 100 should be the first credit course for matriculation into the College.

ACADEMIC SEMINAR (ACSM) 101 - *Introduction to Baccalaureate Education*

This course provides students in baccalaureate programs program-specific information, insights, and tools that maximize their academic success and achieve career goals. ACSM 101 should be taken concurrently with ACSM 100 or as soon as students begin the baccalaureate program in Arts and Sciences.
CREDIT HOURS: 3
PREREQUISITES OR COREQUISITES: ACSM 100

ANTHROPOLOGY (ANTH) 100 - Introduction *to Anthropology*

This is a course in sociocultural anthropology. It will discuss and describe such concepts as: 1) important explanatory and interpretive paradigms (cultural materialism, sociobiology, symbolic anthropology, cognitive anthropology,) postmodernism); 2) subsistence, technology and economics (subsistence types, culture and technology variation, exchange systems); 3) social organization (class and castes, marital residence, descent and kinship, enculturation, rites of passage); 4) religion and

ideology (mythology, prehistoric religions, a survey of world religions, witchcraft and magic); 5) fieldwork (data collection, data analyses, culture shock).
CREDIT HOURS: 3
PREREQUISITE COURSES: None

ANTHROPOLOGY (ANTH) 310 - *Religions of the World*

The primary objective of this course will be to study, compare, and contrast the "great" world religions. These will include: Christianity; Islam; Hinduism; Buddism; Sikhism; Confucianism; Taoism; and Judaism. Lesser know religions will also be studied: Bahai'ism; Jainism; Shintoism; Zoroastrianism.
Note: This course cross registers with RELS 310
CREDIT HOURS: 3
PREREQUISITE COURSES: None

ANTHROPOLGY (ANTH) 320 - *Ethnomedicine*

This course will focus on the concepts of medicine and healing in a cross-cultural context. Topics covered will include medical pluralism (indigenous healing practices and ideologies vs: formal or western medical practices), cultural specific illness, and ethnobotany. The future of traditional medicine in an increasingly westernized world will also be discussed.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

ART (ART) 100 - *Art Appreciation*

This introductory course is a study of how art reflects and shapes human experiences. Students are provided with concepts, terms and a historical context with which to develop, analyze and articulate their personal responses to a variety of visual media, painting, sculpture, architecture and photography. Class meets three hours per week during regular semesters (Fall, Spring) and six hours per week during the summer session. Course sessions are interactive. They incorporate lecture, discussion and reflective writing. Works of art are experienced through exhibits, slides, films and field trips. One research paper is required.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

ART (ART) 320 - *Literature and the Visual Arts*

This course examines the relationships of the literary and visual arts. Comparative study focuses upon various practices, critical theories, and social, historical, and philosophical concepts that cross-artistic boundaries and influence specific works of literature and/or visual arts. Class sessions include lecture, discussion, film and slide presentations as well as group activities. Critical thinking is encour-

aged as students apply concepts to analysis of fiction, poetry, paintings and sculpture from Western and Non-Western cultures. One analytical research paper and several short class presentations are required. This course is team taught by English and art faculty. Credit may be earned for either ENGL 320 or ART 320, but not for both.
CREDIT HOURS: 3
PREREQUISITE COURSES: ART 100; ENGL 200 recommended.

BIOLOGY (BIOL) 100 - *Introduction to Medical Terminology*

This course will introduce pre-clinical students in the various allied health sciences to both basic medical and clinical terminology. Vocabulary relevant to basic human anatomy and physiology, medicine and health, disease and clinical analyses will be emphasized. Jargon applicable to clinical specialties such as nursing, surgical technology, radiologic technology, physical therapy, medical technology and emergency health science will be emphasized. Instruction will utilize a team approach; some instruction methods will involve the use of specific computer programs.
CREDIT HOURS: 1
PREREQUISITE COURSES: None

BIOLOGY (BIOL) 101 - *General Biology I*

This course is an introduction to biologic principles. Students will student basic and important concepts in biology. These include: biochemistry, cell biology, metabolism, photosynthesis, cell division (mitosis). Other topics will include meiosis, genetics, molecular biology, developmental biology, evolution and ecology.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

BIOLOGY (BIOL) 103 - *Laboratory for BIOL 101*

Students will study and visualize basic principles using a variety of techniques including light (bright field) microscopy, preparation of Awet slides, charts, models, dissections and computer programs. Laboratory exercises will include: introduction to the compound microscope, preparation of biological slides (whole Awet mounts), cytology, cell biology, cell physiology and electron microscopy of cells, organelles and tissues using electron micrographs and computer programs, mitosis, meiosis and early embryology. Students will be required to produce and maintain laboratory reports, produce drawings and illustrations and maintain laboratory notebook.
CREDIT HOURS: 1 (lab meets three hours per week).
PREREQUISITE COURSES: BIOL 101 (previous or concurrent).

BIOLOGY (BIOL) 102 - *General Biology II*

This course relates the broad biological principles covered in BIOL 101 to specific groups of animals. Emphasis is placed on the structure (morphology) and physiology of diverse organisms.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 103

BIOLOGY (BIOL) 104 - *Laboratory for BIOL 102*

Students will study a diverse sampling of animals using taxonomic, microscopic and dissection techniques. Emphasis is placed on the divergent structure and physiology of these organisms. Organisms to be studied include those of the following phyla: Sarcomastigophora, Porifera, Cnidaria, Platyhelminthes, Nematoda, Annelida, Mollusca, Arthropoda, Echinodermata and Chordata. Appropriate computer programs will be used to assist learning. Students will also be introduced to the anatomy (osteology) of the human skeleton. Students will be required to generate and maintain laboratory notebooks comprised of laboratory reports, figures and illustrations.
CREDIT HOURS: 1 (lab meets three hours per week).
PREREQUISITE COURSES: BIOL 101, BIOL 103(Previous or concurrent).

BIOLOGY (BIOL) 210 - *Human Anatomy and Physiology I*

This foundation course in the life sciences introduces students to important concepts and biological principles necessary to understanding the structure and function of the human body. These concepts include: basic biology, basic chemistry, basic biochemistry, fundamental cellular biology (cytology and cytostructure) and cellular physiology. Other topics include: basic tissue structure and function, mitosis and meiosis. All fundamental information will be directly related to the concept of systemic homeostasis. Following this introduction, a survey of systemic anatomy and physiology will be initiated. This includes: 1) the structure and function of the integument; 2) the structure and function of teeth, bones and joints; 3) and the structure and function of muscles (skeletal, cardiac and smooth).
CREDIT HOURS: 3
PREREQUISITE OR COREQUISITE COURSES: CHEM 100, CHEM 101 or equivalent. BIOL 212 Laboratory strongly recommended.

BIOLOGY (BIOL) 211 - *Human Anatomy and Physiology II*

This is the continuation of BIOLOGY 210 - Human Anatomy and Physiology-I. The course integrates the structure and function of the various components of the

following organ systems: 1) the structure and function of the nervous system; 2) the structure and function of the endocrine system; 3) digestive system or gastrointestinal-tract including the accessory glands (salivary glands, liver, gall bladder and exocrine pancreas); 4) the cardiovascular and lymphatic systems including the heart, blood vessels and blood; 5) the respiratory system; 6) the urinary system; 7) the male reproductive system; 8) and the female reproductive system. Human developmental biology will be discussed in association with human reproduction and embryogenesis.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 210; CHEM 100, CHEM 101. BIOL 213 Laboratory strongly recommended.

BIOLOGY (BIOL) 212 - *Laboratory for BIOL 210*

Students enrolled in this course will examine the anatomy and morphology of human cells, tissues, organs and systems. Students will study the following: 1) the fine structure of human cells; 2) the light microscopic anatomy and electron microscopic structure of human tissues; 3) the microscopic structure of the integumentary system; 4) the gross anatomy and microscopic morphology of the human skeleton and osseous tissue; 5) the gross anatomy, histology and electron microscopic fine structure of the human skeletal muscular system and muscle tissue; 6) the histology of the nervous system, especially neurons and synapses. Students will utilize a wide variety of methodologies to complete the above units, including: videos, models, human bones, human skulls, microscopic slides of human cells and tissues; electron micrographs of human cells and tissues, and multiple CD-ROM computer programs. The laboratory is a self-paced, computerized laboratory.
CREDIT HOURS: 1
PREREQUISITE COURSES: BIOL 210 (previous or concurrent enrollment).

BIOLOGY 213 (BIOL) - *Laboratory for BIOL 211*

Students enrolled in this course will examine the anatomy and morphology of human cells, tissues, organs and systems. Students will study the following: 1) the gross and microscopic anatomy of the human brain and spinal cord; 2) the gross anatomy of the peripheral nervous system; 3) the light microscopic and fine structure of human endocrine glands; 4) the gross and light microscopic anatomy of the human digestive system; 5) the gross, light and electron microscopic anatomy of the human heart; 6) the structure and distribution of blood vessels, including capillaries; 7) the light microscopic structure of human blood cells; 8) the structure of the lymphoid system and its cells; 9) the gross anatomy, light microscopic and electron microscopic morphology of the human respiratory system; 9) the gross anatomy, histology and electron microscopic fine structure of the human urinary system; 10) the gross anatomy and histology of the male and female reproductive

systems. Students will utilize a wide variety of methodologies to complete the above units, including: videos, models, microscopic slides of human organs, electron micrographs of human organs and multiple CD-ROM computer programs. The laboratory is a self-paced, computerized laboratory.
CREDIT HOURS: 1
PREREQUISITE COURSES: BIOL 210, BIOL 211 (Previous or concurrent enrollment.).

BIOLOGY (BIOL) 235 - *Fundamentals of Human Nutrition*

This course deals with the chemistry of the basic nutrients, i.e., carbohydrates, proteins, fats, vitamins, minerals and water, and their role in the conservation of health. Metabolic pathways utilized for the assimilation of these nutrients are studied. Maintenance of good nutrition habits are discussed. Relationships between poor nutrition and diseases (cancer, heart disease, diabetes, etc.) are described. Information is presented to reinforce the idea that diet/nutrition is the most important health factor that individuals can control. Learning what comprises a healthy diet, and the selection of such a diet is essential to good health. So-called "new" nutrients and nutritional research developments are discussed. Natural medicines and alternative medicines are also described.
CREDIT HOURS: 3
PREREQUISITE COURSES: CHEM 100, CHEM 101 or equivalent and BIOL 210.

BIOLOGY (BIOL) 280 - *Fundamentals of Microbiology*

Fundamentals of Microbiology is an introductory course in which the basic concepts of microbiology are presented. The course covers the impact of microorganisms in a historical context, microbial functional anatomy, metabolic activities, growth, control of growth, and genetic mechanisms among bacteria. Also covered are the multiplication strategies and biological roles of viruses and selected procarytic and eucaryotic microorganisms.
The role of microorganisms in the environment and public health will be discussed. The course also includes an overview of infectious disease principles.
CREDIT HOURS: 3
PREREQUISITE COURSES: CHEM 100, CHEM 101 or equivalent) and BIOL 101 or BIOL 210.
COREQUISITE COURSES: BIOL 281 (Microbiology Laboratory) strongly recommended.

BIOLOGY (BIOL) 281 - *Microbiology Laboratory*

This general laboratory course focuses on the basic principles and procedures used to manipulate and study microorganisms. The course will begin with basic microscopic skills: preparations and staining of specimens, proper use and handling of compound light microscopes, interpretation of visual images. Following the micros-

copy unit students will learn basic aseptic technique, isolation, cultivation, enumeration and pure culturing skills. After students have developed these basic skills they will expand on these methods to experimentally determine whether bacteria produce various enzymes and hemolysins and to cultivate bacterial viruses. Students will determine the sensitivity of selected bacteria to various methods of microbial control: ultraviolet radiation, heavy metals, antibiotics and disinfectants. A genetics unit will demonstrate the concepts of induced mutations and transformation using antibiotic resistance as a marker. An immunology unit will demonstrate serological methods.
CREDIT HOURS: 1
PREREQUISITE COURSES: BIOL 210 or BIOL 101, BIOL 280 (Previous or concurrent.).

BIOLOGY (BIOL) 300 - *General Botany*

A study of the biology of the fungi, the fungus-like protists, the algae (cyanobacteria and protistans), the bryophytes, the cryptogams and the phanerogams. Among the phanerogams an emphasis will be placed on the gymnosperms. Topics dealing with the general biology and categorization of the angiosperms will also be presented.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, and BIOL 104.

BIOLOGY (BIOL) 301 - *The History of Biology and Medicine*

This course will study the history of biology and medicine through the following eras: 1) prehistory, 2) ancient China, 3) ancient India, 4) ancient Egypt, 5) ancient Mesopotamia, 6) ancient Greece, 7) Alexandria, 8) ancient Rome, 9) the middle ages, 10) the Renaissance, 11) the New World, 12) the period of Enlightenment and Victorian times, 13) and finally modern biological and medical themes. Selected and significant historical topics in the development of such fields as biochemistry, microbiology, botany, zoology medicine, physiology, anatomy, genetics, embryology, ecology, dentistry, medicine, pharmacology, and surgery will be discussed. Concepts of futuristic biology and medicine will also be developed. The impact of both the biological and medical sciences on society and technology will be described throughout the course.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, 102, 103, 104; or BIOL 210, 211, 212, 213.

BIOLOGY (BIOL) 310 - *Fundamentals of Immunology*

Fundamentals of immunology is an introductory course in which both basic and advanced concepts of immunology are presented. The basic concepts presented include, but are not limited to: function of the innate defense mechanisms, antigens, development of the immune system, lymphocytes, immunoglobulins, lymphokines

and inflammation. Advanced concepts that will be presented are: B- and T-lymphocyte ontogeny, generation of antibody diversity and genetics of the major histocompatibility complex, cytokine networks and immunogenetics. Following the successful completion of the course, the student should have a firm understanding of the organization, function and operation of the immune system in the defense against viruses, bacteria, fungi, parasites, tumors and transplanted courses.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. BIOL 280, BIOL 281 or BIOL 290. CHEM 101, CHEM 102, recommended. Or completion of 30 credit hours, or a minimum GPA or 3.00 or permission, Dean, Arts & Sciences.

BIOLOGY (BIOL) 312 - *General Genetics*

This course is a study of fundamental hereditary mechanisms and relationships. Emphasis is placed on nucleic acids and the molecular and cytological roles by which genes are distributed and expressed. The course will cover six major units: I. The continuity of life - cell division and genetics. II. Heredity, genes and DNA. III. Expression of genetic information. IV. Recombinant DNA. V. Detection of nucleic acids and proteins. VI. Gene function in eukaryotic cells.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104.

BIOLOGY (BIOL) 315 - *Introduction to Kinesiology*

This course is designed to provide the student with a general overview of the principles involved in human motion. Emphasis will be placed on basic principles of kinesiology including: 1) a review of the major body systems that are involved in generating movement; 2) an overview of basic biomechanics;
3) an in-depth look at the anatomy (including origin and insertion of muscular attachments) of the major structures and joints of the human body such as: a) shoulder, b) elbow, c) wrist, d) hand, e) temporomandibular joint (TMJ), f) neck and trunk; g) pelvic girdle, h) hip, i) knee, j) ankle joint and foot. The course will also involve an in depth look at the actions that occur at these joints.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 210, BIOL 212, CHEM 100 or CHEM 101.

BIOLOGY (BIOL) 320 - *Medical/Surgical Observation*

This course is directed at undergraduate, pre-health care students in an effort to introduce them to clinical medicine, its related fields and required training and preparation. Clinical medicine will be integrated with basic biomedical science and research. Each student will complete eight required surgical observation procedures and autopsies at local hospitals. Multiple elective observations are also required.

During this course students actually work side-by-side with physicians and surgeons in the operating room. This course has a limited enrollment. This course may NOT be audited.

CREDIT HOURS: 3 (Course can be taken two times for a total of 6 credit hours.).

PREREQUISITE COURSES: BIOL 101, 102, 103, 104 (equivalent); or two semesters of General Zoology; or BIOL 210, BIOL 211, 212, 213. Basic Chemistry (CHEM 101 or equivalent) recommended. Or, completion of 30 credit hours, or a minimum GPA of 3.00, or permission, Dean, Arts & Sciences.

BIOLOGY (BIOL) 330 - *General Histology*

This course will thoroughly investigate and analyze the structure of the cells and tissues that comprise the human body. The two major subdivisions of this course are: *The structure of cells (cell biology):* This part of the course will study the fine structure (ultrastructure) of cells. Various techniques and procedures for the study of cellular fine structure will be discussed. These include: transmission electron microscopy, scanning electron microscopy, electron microscopic enzyme histochemistry, immunoelectronmicroscopy, X-ray spectroscopic analysis. *II. The second part of the course will examine the structure (light microscopy and electron microscopy) of the four basic tissue types (epithelial tissue, the connective tissue, muscle tissue and nerve tissue).* Techniques for studying tissues will also be discussed. Structural-functional relationships will be discussed throughout. Relevant histopathology will also be incorporated into the course. Students will be required to complete multiple laboratory assignments using assigned computer programs, electron micrographs and a complete histology microfiche set.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 210, BIOL 211. BIOL 346, strongly recommended. Or, the completion of 30 credit hours, or a minimum G.P.A of 3.00, or permission, Dean, Arts & Sciences.

BIOLOGY (BIOL) 331 - *Microscopic Anatomy*

This course will thoroughly investigate and analyze the light and electron microscopic structure of the cells and tissues that comprise the organs of the human body. All lectures will discuss the light microscopic histology, the ultrastructure and the molecular structure of human cells and tissues. Functional and structural specializations will be described and discussed in detail.

Changes in cell structure related to disease process, i.e., cellular pathology of histopathology, will also be described. Organs and systems to be covered include the following: the cardiovascular system: the heart, arteries, veins and capillaries; the brain and spinal cord: myelinated and non-myelinated nerves; the endocrine system: the adenohypophysis, the neurohypophysis, the pineal gland, the thyroid and parathyroid glands, the islets of Langerhans; the adrenal medulla and the adrenal

cortex; the digestive system: stomach, small intestine, large intestine; salivary glands, liver, gall bladder; the respiratory system: bronchi, bronchioles, alveoli, respiratory membrane; the urinary system: kidneys, glomeruli and nephrons; and the male and female reproductive systems: ovaries, testes, various ducts, etc. Like BIOL 330, this course also has a laboratory component.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 330.

BIOLOGY (BIOL) 346 - *Cellular, Molecular and Developmental Biology*

This course will present information related to cytology, cellular physiology, molecular biology developmental biology.. The primary concepts to be presented will include the following. I. An overview of cells and cell research. II. Cell-to-cell signaling and communication during development.III. The flow of genetic information. IV. Cell structure and function. V. Cell regulation. Specific topics to be covered are: 1) the organization of cellular genomes; 2) replication, maintenance and rearrangements of genomic DNA; 3) RNA; 4) protein synthesis; 5) the nucleus; 6) the ER, Golgi complex and lysosomes and their role in protein sorting and transport; 7) mitochondria, peroxisomes, glyoxysomes and chloroplasts in bioenergetics and metabolism; 8) the cytoskeleton and its role in cell movement and form; 9) the plasmalemma and the cell surface; 10) cell signaling; 11) the cell cycle; 12) and cancer. Research in cell biology and contemporary techniques for studying cells will be emphasized throughout the course. This course will involve multiple laboratory exercises.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. Recommended CHEM 101 and CHEM 102, BIOL 235. Or, completion of 30 credit hours, or a minimum G.P.A. of 3.00, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL 349) - General Parasitology

In this course students will understand learn about the major parasites of humans and domesticated animals (cattle, sheep, dogs, horses, etc.). This experience will include: 1) epidemiology, 2) evolution, morphology, and natural history. The amazingly complex, yet successful life cycles of these animals will be related in detail. This course has a laboratory component.
CREDIT HOURS: 3
PREREQUISITE COURSES: Students must be enrolled in the either the Human Medicine B.S. degree program or the Biology B.S. degree program. 6 credit hours CHEM. BIOL 101, BIOL 102, BIOL 103, BIOL 104 or BIOL 210, BIOL 211, BIOL 212, BIOL 213.

BIOLOGY (BIOL) 350 - *Principles of Ecology*

This course describes the fundamental ecological principles governing the structure and function of populations, communities, and ecosystems. Ecology is a holistic (broad-based and integrative) approach to understanding living things as they relate to both their physical environment and to each other. It is the interactions of living things that provide the data for ecological studies.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, 102, 103, 104; or BIOL 210, 211, 212, 213.

BIOLOGY (BIOL) 355 - *Advanced Nutrition*

This course examines contemporary ideas with regard to the role of nutrition in human health and disease. Reasons for the growth and popularity of nutritional therapies as a practical alternative to contemporary medical and pharmacological practices are presented. Recent developments in nutrition research as related to effective alternative medicine are described. The role of poor nutrition in the etiology of many health related problems is presented. Alternatively, the role of nutrition and nutrients in health maintenance and disease prevention are discussed. Diseases with strong nutritional links will be described. These include: cancer and carcinogenesis, heart disease, vascular disease, diabetes, chronic inflammatory disease (arthritis), neurological disorders, bone disease (osteoporosis), genetic disease and birth defects. The "sugar-busters" concept will be described and discussed in detail. Much emphasis will be placed on such so-called "new" nutrients as: the super-antioxidants and anti-cancer nutrients (proanthocyanidin, alpha-lipoic acid, glutathione, bioflavonoids, bilberry extract, ginkgo biloba extract, green tea extract, Tumeric, lycopene, Echinacea), natural anti-arthritics (glucosamine, chondroitin sulfate, methylsulfonylmethane or MSM), important amino acids for maintaining normal brain function (S-adenosyl methionine or SAM, L-cysteine, L-glutamic acid) natural anti-hypertensives, (Gastrodia elata, Uncaria rhynchophilia, Prunella vulgaris, Chrysthanemum indicum, Apocynum venetum, Eucommia ulmoides, Cassia obtusifolia, Rauwolfia yunnaneneus), natural blood glucose lowering agents (Gymnema sylvestri, vanadium, chromium, alpha-lipoic acid) and natural blood lipid lowering agents (chitosan, chitosol).
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. BIOL 235, CHEM 101, CHEM 102, CHEM 103, CHEM 104. CHEM 201 and 202 strongly recommended. Or, completion of 30 credits hours, or a minimum G.P.A. of 3.00, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) 381 - *Pathogenic Microbiology*

Pathogenic microbiology will emphasize the pivotal balance between microbial mechanisms of virulence and host defenses. The course will begin with an overview of the disease process and the types of pathogens. Next, a unit on innate and acquired host defenses will be presented. Mechanisms used by pathogens to overcome or inactivate host defenses will emphasized throughout the course. The remaining portion of the course will be comprised of units covering selected bacterial, viral, protozoan, fungal and pathogens. The course will conclude with a study on the evolution and emergence of infectious diseases. Students will research and complete a project.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. BIOL 280 and BIOL 281 or BIOL 290. CHEM 101 and CHEM 102. CHEM 201 and 202 strongly recommended. Or, completion of 30 credit hours, or a minimum G.P.A. of 3.00, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) 401 - *Pathophysiology*

This course is a study of structural and physiological alterations associated with multiple disease processes and cell death. Topics for discussion will include: 1) inflammation; 2) water and electrolyte imbalance; 3) hemodynamic disorders; 4) trauma; 5) shock; 6) neoplasia (carcinogenesis); 7) cell death and necrosis; 8) and apoptosis.

CREDIT HOURS: 3

PREREQUESITES: BIOL 210, BIOL 211; CHEM 201. BIOL 212 and BIOL 213 strongly recommended.

BIOLOGY (BIOL) 410 - *Fundamentals of Immunology and Immunology Laboratory*

BIOL 310 plus a 1 credit hour immunology laboratory (a total of 4 credit hours). Laboratory topics will cover various aspects of innate immunity, organs, tissues and cells of the immune system and serology as it applies to clinical medicine. The laboratory meets three hours per week.

CREDIT HOURS: 4

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. BIOL 280 and BIOL 281 or BIOL 290. CHEM 101, CHEM 102. CHEM 201 and CHEM 202 strongly recommended. Or, completion 60 credit hours, or a minimum G.P.A. of 3.50, or permission Dean, Arts and Sciences.

BIOLOGY (BIOL) 450 - *Endocrinology*

This course will present the various types of hormones (polypeptide, protein, steroid, fatty acid, cytokines, etc.) and their mechanism(s) of action on specific target cells. The individual endocrine glands will then be surveyed with regard to their structure and function. The role of hormones as in cell-to-cell communication and the regulation of systemic metabolism and homeostasis will be studied in detail. Information regarding the specific endocrine glands and their specific secretory (hormonal) products, their function, biochemistry and physiology will be presented. Both the traditional and the so-called "new" endocrine glands (skin, kidneys, heart, etc.) will be evaluated. Clinical relationships between endocrine hyposecretion and hypersecretion, as related to a broad spectrum of endocrine and homeostatic disorders, will be presented in detail. Multiple laboratory assignments will be required.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. CHEM 101, CHEM 102. CHEM 201 AND CHEM 202 strongly recommended. Or, completion of 60 credit hours, or a minimum G.P.A. of 3.50, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) 455 - *Oncology and Tumor Cell Biology*

This course will endeavor to instruct students on the development and causes of cancer. Students will study the basic cell biology, biochemistry and molecular biology of cancer cells and tumors. Current ideas with regard to cancer prevention and treatment will also be discussed. The latter will include the role of nutrition in the treatment and prevention of carcinogenesis and tumorigenesis. Assigned biomedical journal readings will be utilized throughout the course as supportive information for all lectures and text assignments. Some INTERNET sites will also be utilized. Some laboratory assignments will also be required.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL213. BIOL 235, BIOL 280 or BIOL 290. CHEM 101, CHEM 102. BIOL 201 and BIOL 202 strongly recommended. Or, completion of 60 credit hours; a minimum G.P.A. of 3.50, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) 460 - *Human Cardiovascular Anatomy and Physiology*

Biology 460 will thoroughly investigate and discuss the normal structure, function and biochemistry/pharmacology, as well as the pathophysiology of the heart, blood vessels, capillaries, blood and lymphoid system. The following topics will be emphasized: 1) the special properties of cardiac muscle; 2) the events of the cardiac

cycle; 3) the regulation of the heart rate and cardiac rhythm; 5) the ECG/EKG; 6) the physiology of elastic and muscular arteries; 7) the regulation of blood pressure; 8) capillary transport; 9) the structure and function of the blood cells; 10) red blood cells and gas transport; 11) the function of the white blood cells, including the B and T-lymphocytes; 12) extrinsic and intrinsic blood clotting; 13) and the fetal circulation. The pharmacodynamics of the cardiovascular system will also be discussed. Clinically, topics such as cardiac arrhythmias, hypertension, hypercholesterolemia, LDLs, HDLs and atherosclerosis, and heart transplants will be evaluated. Computer laboratory assignments will be used to visually enhance didactic concepts. This course has a laboratory component.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. BIOL 235, CHEM 101, CHEM 102. CHEM 201 and CHEM 202 strongly recommended. Or, completion of 60 credit hours, or a minimum G.P.A. of 3.50, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) 465 - *Human Neuroanatomy and Neurophysiology*

BIOL 465 will present and discuss the normal structure and function of neurons, the functional units of the nervous system. This will include details on resting membrane potentials, action potentials and other aspects of bioelectricity. The structure and neurochemistry of synapses will also be described including information relevant to "new" neurotransmitters. The structure and function of the brain and spinal cord will also be discussed in detail including specific nerve nuclei and tracts (ascending and descending). Some topics for conversation and discussion will include: 1) the structure and function of nerve cells and synapses; 2) bioelectricity, action potentials and nerve impulses; 3) the CSF and the physiology of intracranial pressure; 4) the structure and function of the cerebrum, cerebellum and brain stem, including specific nerve nuclei; 5) the cranial nerves;
6) the spinal cord, ascending and descending pathways; 7) the biochemistry of neurotransmitters and neuropeptides; 8) growth and repair in the nervous system. When ever possible fundamental information and related clinical correlations will be presented and discussed. This course does have a laboratory component.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. BIOL 235, CHEM 101, CHEM 102. CHEM 201 AND 202 strongly recommended. BIOL 346 strongly recommended. Or, completion of 60 credit hours, a minimum G.P.A. of 3.50, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) BIOL 470 - *The Structure and Function of the Urinary System*

This is an advanced anatomy and physiology course designed primarily for pre-med (human medicine) majors. The course will describe primarily the role of the kidneys in the regulation of: osmotic balance, electrolyte balance and pH balance as required for the maintenance of in cellular and total body homeostasis. The physiology of nephrons, the functional units of the kidney, in glomerular filtration, tubular reabsorption and tubular secretion will be detailed. The countercurrent mechanisms involved in these activities will be described. In addition, contemporary ideas with regard to the role of the kidneys in other biological and physiological activities will be discussed. These include: 1) the role of the kidney in blood pressure regulation; 2) the role of the kidney in Ca++ homeostasis; 3) the role of the kidney in erythropoiesis, 4) and others. The course will close with a discussion of renal pathophysiology. The course does have a laboratory component. This will involve studies on: 1) the gross anatomy of the kidneys; 2) the histology of the kidneys; and 3) the electron microscopy of a nephron

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104. Or BIOL 210, BIOL 211, BIOL 212, BIOL 213. BIOL 346 strongly recommended.

BIOLOGY (BIOL) 472 - *The Structure and Function of the Respiratory System.*

This is an advanced anatomy and physiology course designed primarily for pre-med (human medicine) majors. The course will describe primarily the anatomy and physiology of respiration of the respiratory system. The course will emphasize: 1) the mechanics of respiration (inspiration and expiration); 2) the physiology of pulmonary gas exchange (external respiration) and blood - tissue gas exchange (internal respiration); 3) the transport of the respiratory gasses through the cardiovascular system. The role of the respiratory system in acid base balance will be described. Neural mechanisms regulating respiration will also be discussed. The pathophysiology of the respiratory system, involving chronic obstructive pulmonary disorders (COPDs), will be studied.

CREDIT HOURS: 3

PREREQUISITE COURSES: BIOL 101, 102, 103, 104; or BIOL 210, 211, 212, 213.

BIOLOGY (BIOL) 475 - *Paleo-Evolution*

This course will focus on: 1) the basic principles and mechanisms of biological evolution; 2) human evolution as conceptualized within the context of paleoanthropology. Important topics are: 1) the historical development of evolutionary theory; 2) population genetics; 3) phenotypic variation; 4) speciation; 5) and macroevolution.

These theoretical notions, and others, will be discussed in the context of a thorough analysis of human evolution with a special emphasis on paleoanthropology.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL103, BIOL 104, BIOL 312

BIOLOGY (BIOL) 480 - *Pathogenic Microbiology and Pathogenic Microbiology Laboratory*

BIOL 381 plus a 1 credit hour pathogenic microbiology laboratory (4 credit hours total). The laboratory meets three hours per week.
CREDIT HOURS: 4
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104 or BIOL 210, and BIOL 211. BIOL 280 and BIOL 281 or BIOL 290. CHEM 101 and CHEM 102. CHEM 201 AND CHEM 202 strongly recommended. Or, completion of 60 credit hours, a minimum G.P.A. of 3.50, or permission, Dean, Arts and Sciences.

BIOLOGY (BIOL) 482 - *Introduction to Virology*

Introduction to virology is intended to familiarize students with the biology of the most important group of human pathogens. The course is concept oriented, which will focus primarily on the molecular events of viral multiplication and the interactions between the virus and the host at the cellular and organismic level. Specific aspects of viral multiplication, which will be addressed, are elements of host cell tropism, entry and penetration, biosynthetic strategies and maturation of virions. Virus-host interactions will include a discussion of host cell defenses, the interferons and other naturally occurring or synthetic antivirals, as well as the principle effectors of the immune system responsible for viral clearance and the prevention of reinfection. The principles of persistent viral infections are discussed.
CREDIT HOURS: 3
PREREQUISITE COURSES: BIOL 101, BIOL 102, BIOL 103, BIOL 104 or BIOL 210 and BIOL 211. BIOL 280 and 281 OR biol 290. CHEM 101, CHEM 102. CHEM 201 and CHEM 202 strongly recommended. Or, completion of 60 credit hours, or a minimum G.P.A. of 3.50, or permission Dean, Arts and Sciences.

BIOLOGY (BIOL) 486 - *General Pharmacology*

Course describes and discusses pharmacology and medicine. Topics for discussion will be: 1) principles of pharmacology; 2) pharmacokinetics; 3) pharmacodynamics; 4) auotnomic pharmacology; 5) cardiovascular pharmacology; 6) autacoids;

7) chemotherapy; 8) endocrine pharmacology; 9) CNS pharmacology; 10) hemo/ immunopharmacology. Clinical case scenarios will be presented.
CREDIT HOURS: 3
PREREQUISITES: BIOL 210, BIOL 211, CHEM 101.

BIOLOGY (BIOL) 496 - *Human Medicine/Biology Seminar*

This course is a series of one-hour seminars presented by both students and faculty. All presentations and reviews will involve the presentation and discussion of significant new research and clinical information related to human medicine. Students will select topics from either the medical literature or the Internet. Students will then prepare an annotated and illustrated report for presentation and discussion at class meetings. Audio-visual techniques must be utilized during all student lectures. Each student will make multiple presentations during the semester. Grades will be based on the thoroughness and understanding of the subject matter as demonstrated by both the written reports and the class presentations by each individual student. In class participation will also be evaluated. The format for this course is not unlike that of a journal club. During the first weeks of the course, involved faculty will present demonstrative seminars to students.
CREDIT HOURS: 3
PREREQUISITE COURSES: Students must be enrolled in the Human Medicine or Biology Degree Programs. CHEM 101, CHEM 102, CHEM 103, CHEM 104; CHEM 210, CHEM202, CHEM 203, CHEM 203. Also 12 credit hours of 200, 300, 400 BIOL courses.

BIOLOGY (BIOL) 499 - *Research Problems in Biology/Medicine*

`This course introduces students to basic scientific research and the techniques used in basic scientific research. A faculty mentor will direct and oversee all student endeavors, starting with the development of the initial scientific question, continuing through laboratory methodologies and culminating with the discussion and oral presentation of the results.
CREDIT HOURS: 1 - 6 CR HRS.
PREREQUISITE COURSES: Junior Standing, Human Medicine Major or Biology Major. Completion of 60 Credit Hours.

CHEMISTRY (CHEM) 100 - Introduction to Chemistry

This is a fundamentals of chemistry course. The course is subdivided into inorganic chemistry, organic chemistry and biochemistry.
CREDIT HOURS: 3
PREREQUISITE COURSES: None.

CHEMISTRY (CHEM) 101 - *Fundamentals of Chemistry I*

Fundamentals of Chemistry I introduces the student to the basic principles of the science of chemistry. The course begins with a discussion of the importance of units of measurement, and the interconversions between units and the reliability of data. These themes are reiterated throughout the course. Major areas of emphasis in chemistry 101 are: the organization of matter; 2) the stoichiometry of chemical change; 3) gas behavior; 4) energy transformations that accompany chemical change; 5) and electron configurations and periodicity.
CREDIT HOURS: 3
PREREQUISITE COURSES: MATH 112.
COREQUISITE COURSES: MATH 112; CHEM 103 (Lab), strongly recommended.

CHEMISTRY (CHEM) 102 - *Fundamentals of Chemistry II*

CHEM 102 builds on and expands the basic chemical principles learned in CHEM 101. This course begins with a discussion of the theories of chemical bonding and molecular shapes. This is followed by a brief overview of the bonding properties of carbon and the structural aspects of organic compounds. Most of the course is devoted to chemical reactions, with emphasis on quantitative and conceptual features of reaction dynamics. Units include chemical kinetics, equilibrium, transition state theory and chemical thermodynamics. Application of these concepts will include units covering equilibria of acid-base systems and ionic systems (buffers, solubility, and complexions). The purpose of CHEM 102 is to provide students with a strong foundation in understanding chemical reactions as dynamic processes. These processes have wide applications in most natural phenomena.
CREDIT HOURS: 3
PREREQUISITE COURSES: CHEM 101, CHEM 103, CHEM 104 (Previous or concurrent).

CHEMISTRY (CHEM) 103 - *Laboratory for CHEM 101*

Laboratory for Fundamentals of Chemistry I is a hands-on laboratory course designed to interface with, and complement, the topic covered in Chemistry 101. Students learn the basics of measurements, scientific method, chemical analysis, and recording data.
CREDIT HOURS: 1 (Lab meets three hours per week.).
PREREQUISITE COURSES: CHEM 101 (Previous or concurrent).

CHEMISTRY (CHEM) 104 - *Laboratory for CHEM 102*

Laboratory for Fundamentals of Chemistry II is a hand-on laboratory designed to provide experimental inquiry into the topics covered in Chemistry 102. Students expand their knowledge of chemical analysis and learn some basic techniques of

synthesis. Topics covered include: 1) chemical kinetics; 2) equilibria; 3) and thermodynamics.
CREDIT HOURS: 1 (Lab meets three hours per week.)
PREREQUISITE COURSES: CHEM 101, CHEM 103, CHEM 102 (Previous or concurrent).

CHEMISTRY (CHEM) 201 - *General Organic Chemistry I*

A study of the compounds of carbon and includes the study of aliphatic and aromatic compounds. Course will include discussions on the biological aspects of organic chemistry.
CREDIT HOURS: 3
PREREQUISITE COURSES: CHEM 101, CHEM 102, CHEM 103, CHEM 104. CHEM 203 (Previous or concurrent).

CHEMISTRY (CHEM) 202 - *General Organic Chemistry II*

A continuation of CHEM 201. Course will discuss carbon compounds containing carbonyl, carboxylic acid, amine, and pheno-functional groups. Relationships with biological chemistry will be described.
CREDIT HOURS: 3
PREREQUISITE COURSES: CHEM 201, CHEM 203. CHEM 204 (Previous or concurrent).

CHEMISTRY (CHEM) 203 - *Laboratory for Chemistry 201*

This course will introduce chemistry students to basic laboratory operations and procedures. Techniques of organic chemistry will be described, including an introduction to spectroscopy. Computer analyses will be utilized.
CREDIT HOURS: 1 (Lab meets three hours per week).
PREREQUISITE COURSES: CHEM 101 (Previous or concurrent).

CHEMISTRY (CHEM) 204 - *Laboratory for Chemistry 202*

A continuation of CHEM 203. This course will acquaint chemistry students with important laboratory operations. The course will stress reactions and synthesis. Computer analyses will be utilized.
CREDIT HOURS: 1 (Lab meets three hours per week).
PREREQUISITE COURSES: CHEM 201, CHEM 203. CHEM 202 (Previous or concurrent).

CHEMISTRY (CHEM) 255 - *Analytical Chemistry*

This course deals with equilibria, titrations, electrochemistry, chromatography and a variety of spectroscopic techniques. The latter include nuclear magnetic resonance (NMR), UV/vs and mass spectrometry (MS). The steps in chemical analyses, unit conversions, determination of chemical concentrations and the preparation of solutions are described in relation to analytical chemistry. The course encompasses methods for calibrating analytical equipment and a description of the statistical methods that can be used to evaluate experimental error.
CREDIT HOURS: 2
PREREQUISITE COURSES: CHEM 101, CHEM 102, CHEM 103, CHEM 104.
COREQUISITE COURSES: CHEM 256.

CHEMISTRY (CHEM) 256 - *Laboratory for CHEM 255*

This course is an analytical chemistry laboratory that deals with experiments involving titrations, electrochemistry, chromatography and a variety of spectroscopic techniques. Chemical measurements involve unit conversions, solution preparations and the use of basic analytical chemistry equipment. Statistical analysis and error determinations are applied to the various analytical experiments performed during the course.
CREDIT HOURS: 1 (Lab meets three hours per week).
PREREQUISITE COURSES: CHEM 101, CHEM 102, CHEM 103, CHEM 104.
COREQUISITE COURSES: CHEM 255 (Previous or corequisite).
CHEMISTRY (CHEM) 335 - *Biochemistry*

CHEMISTRY (CHEM) 335 - *Biochemistry*

This course will be comprised of approximately 15 - 20 units. Students will study: 1) the basic biochemical molecules, their structure and functions. These will include: proteins, enzymes, lipids, carbohydrates (including glycogen metabolism and gluconeogenesis) and nucleic acids (including replication, transcription and protein synthesis). 2) Studies on intermediary metabolism will include: glycolysis, the pentose phosphate pathway, the citric acid cycle (Krebs or TCA cycle), oxidative phosphorylation, lipid metabolism, amino acid metabolism. 3) Students will also study signal transduction pathways and mechanisms involved in the action of hormones and neurotransmitters.
CREDIT HOURS: 3
PREREQUISITE COURSES: CHEM 101, CHEM 102, CHEM 103, CHEM 104. CHEM 201, CHEM 202, CHEM 203, CHEM 204. BIOL 346 strongly recommended.

COMPUTER SCIENCE (CSCI) 100 - *Introduction to Computers*

Today, computer literacy is absolutely essential to many fields, especially in the health sciences. This course is predicated on this fact and introduces students to the basics of computer science, with an emphasis on developing proficiency performing essential computer tasks (e.g. e-mail, surfing the INTERNET, word processing, spreadsheets, and making presentations). Utilizing the latest computer equipment and Windows 98 and NT based programs, students receive direct hands-on instruction, with the majority of class time spent in the computer lab.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

ENGLISH (ENGL) 010 - Introduction to English Composition

This is a developmental writing course designed as preparation for ENGLISH COMPOSITION 101 (ENGL 101). The course focuses on grammar as a communicative tool as well as sentence and paragraph structure. ENGL 010 provides an intensive review of grammar/mechanics, introduction to writing as a process, and opportunities to strengthen reading skills. Placement in ENGL 010 determined by ACT/SAT test scores.
CREDIT HOURS: 3 - NOT for degree credit.
PREREQUISITE COURSES: None

ENGLISH (ENGL) 101 - English I

This course is an introductory, college level writing course. The course focuses on writing as a process, effective writing style and the features of specific writing tasks. Students are encouraged to examine and appropriately revise their own reading and writing habits. Likewise, students are exposed to theories, strategies and tools that can successful assist them in the completion of real life rhetorical tasks. Placement in ENGL 101 determined by ACT/SAT test scores.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

ENGLISH (ENGL) 102 - English II

English Composition II builds upon the basic reading, writing and critical thinking skills presented in ENGL 101. Emphasis is placed on critical thinking, analytical reading and strategies for presenting ideas supported by sound reasoning, convincing evidence and language appropriate to the task and audience. The course provides practical experience in written and oral communication, computers and composition, conflict resolution, critical analysis and library research. Class ses-

sions are interactive and involve lecture, discussion, group projects, viewing of films and writing tasks.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 101.

ENGLISH (ENGL) 200 - Introduction to Literature

This course is designed to introduce students to basic features of the three major literary forms: fiction, poetry, drama. The class meets for three hours per week during regular semesters and six hours per week during the summer semester. Course sessions are interactive. In addition to lecture, sessions include discussion, writing tasks, group activities, and presentations. Two critical analysis papers are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 101.

ENGLISH (ENGL) 211 - Academic Discourse

This advanced composition course prepares students to meet the rhetorical (reading/writing) demands of courses within three major academic areas: humanities, social sciences, and natural sciences. The literary conventions, standards, tools, and practices of all three discourse "communities" are surveyed, and students focus their semester projects within their major academic discipline or area of interest. The class meets for three (3) hours per week for the first eight (8) weeks. During the remainder of the semester, students work independently on their projects and meet as a class for one (1) hour per week.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 102 or permission of the instructor.

ENGLISH (ENGL) 220 - British Literature I

This course provides a survey of major British literary events and works occurring from the Middle Ages through the 18th century. Course sessions are interactive. In addition to lecture, sessions include discussion, writing tasks, group activities, and presentations. One analytical paper and one class presentation are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor.

ENGLISH (ENGL) 221 - British Literature II

This course continues the survey of major British literary history begun in ENGL 220. Study begins with the 19th century and ends with the present day. Course sessions are interactive. In addition to lecture, sessions include discussion, writing

tasks, group activities, and presentations. One analytical paper and one class presentation are required.
CREDIT HOURS: 3.
PREREQUISITE COURSES: ENGL 200 or permission of the instructor.

ENGLISH (ENGL) 230 - American Literature I

This course provides a survey of major American literary events and works occurring from the Colonial Period through approximately mid-19th century with the works of Walt Whitman and Emily Dickinson. Course sessions are interactive. In addition to lecture, sessions include discussion, writing tasks, group activities, and presentations. One analytical paper and one class presentation are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor.
ENGLISH (ENGL) 231 - American Literature II

ENGLISH (ENGL) 231 - *American Literature II*

This course continues the survey of major American literary history begun in ENGL 230. Study begins with the second half of the 19th century and ends with the present day. Course sessions are interactive. In addition to lecture, sessions include discussion, writing tasks, group activities, and presentations. One analytical paper and one class presentation are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor.

ENGLISH (ENGL) 275 - *Introduction to Language*

In this introductory language course, students explore language structure (including phonetics, phonology, morphology, syntax, semantics and pragmatics) and related topics such as writing systems, animal communication, and the history and cultural significance of language. Class sessions will include lectures, discussions and videos. Reading assignments and writing tasks are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 101.

ENGLISH (ENGL) 276 - *History of the English Language*

This course examines the development of the English language from Old English times to the modern English period.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 101.

ENGLISH (ENGL) 300 - *Studies in Fiction*

This course exams the forms, theories and history of the two major forms of fiction: the novel and the short story. Course sessions are interactive. In addition to lecture, session include discussion, writing tasks, group activities and presentations.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor.

ENGLISH (ENGL) 301 - *Studies in Poetry*

This course examines the forms, theories, and history of poetic literature. Course sessions are interactive. In addition to lecture, sessions include discussion, writing tasks, group activities, and presentations. One analytical paper and one class presentation are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor. ENGL 211 encouraged.

ENGLISH (ENGL) 302 - *Studies in Dramatic Literature*

This course examines the forms, theories, and history of dramatic literature. Course sessions are interactive. In addition to lecture, sessions include discussion, writing tasks, group activities, and film. One analytical paper and attendance at one or more live plays are required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor. ENGL 211 encouraged.

ENGLISH (ENGL) 310 - *Creative Writing*

This course offers study an opportunity to practice writing literary forms they may have read independently or in other courses, namely poetry and short fiction. The emphasis is on composition and critique of poems and short stories. Reading assignments focus on both classic and contemporary examples of the genres studied.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 101.

ENGLISH (ENGL) 320/ART 320 - *Literature and the Visual Arts*

This course examines the relationship of the literary and visual arts. Comparative study focuses upon various practices, critical theories, and social, historical, and philosophical concepts that cross artistic boundaries and influence specific works of literature and/or visual arts. Class sessions include lecture, discussion, film and slide

presentations, and group activities. Critical thinking is encouraged as students apply concepts to analysis of fiction, poetry, paintings and sculpture from Western and Non-Western cultures. One analytical research paper and several short class presentations are required. The course is team-taught by faculty from the English and the art disciplines.
CREDIT HOURS: 3 (credit may be earned for either ENGL 320 or ART 320 but not for both).
PREREQUISITE COURSES: ART 100, ENGL 200 recommended.

ENGLISH (ENGL) 330/ MUSIC (MUSI 330) - *Literature and Music*

This course examines the relationship of the literary and musical arts. Comparative study focuses upon various practices, critical theories, and social, historical, and philosophical concepts that cross artistic boundaries and influence specific works of literature and/or music. Class sessions include lecture, discussion, film and audio presentations, and group activities. Critical thinking is encouraged as students apply concepts to analysis of fiction, poetry, and musical compositions from Western and Non-Western cultures. One analytical research paper and several short class presentations are required. The course is team-taught by faculty from the English and the music disciplines.
CREDIT HOURS: 3 (credit may be earned for either English 330 or Music 330 but not for both).
PREREQUISITE COURSES: MUSI 100, ENGL 200 recommended.

ENGLISH (ENGL) 400 - *Introduction to Critical Theory*

This course presents an historical survey of critical thought about the nature and function of reading, writing and written language. Beginning with the Greek philosophers and ending with postmodernist theorists, students study and apply concepts to specific works of fiction, poetry, drama, history, and biography. Class sessions include lecture, discussion, and group activities. One analytical research paper focusing on a book length work of the student's choice from a pre-approved list is required.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor. ENGL encouraged.

ENGLISH (ENGL) 420 - *Special Topics in British Literature*

This course focuses upon a specific author, theme, period, or genre in British literary history. Class sessions may include lecture, discussion, and film. One analytical research paper is required. This course may be taken for credit more than once when topics differ.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor. ENGL 211 and ENGL 400 encouraged.

ENGLISH (ENGL) 430 - *Special Topics in American Literature*

This course focuses upon a specific author, theme, period, or genre in American literary history. Class sessions may include lecture, discussion, film, and presentations. One analytical research paper is required. This course may be taken for credit more than once when topics differ.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor. ENGL 211 and ENGL 400 encouraged.

ENGLISH (ENGL 440) - *Special Topics in World Literature*

This course focuses upon a specific author, theme, period, or genre in the literary heritage of a specific culture other than British or American. Works in translation are assigned. Class sessions may include lecture, discussion, film, and presentations. One analytical research paper is required. This course may be taken for credit more than once when topics differ.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200 or permission of the instructor. ENGL 211 and ENGL 400 encouraged.

ENGL 450 - *Senior English Project*

This independent study course allows senior English majors opportunity to pursue personal interests while practicing skills necessary for scholarly research and critical analysis of a literary work, genre, author, or period. Students who complete this course should be ready to begin graduate studies in an English program. Under close faculty supervision, the student designs and completes a project that must include development of an annotated bibliography and an analytical research paper suitable as a student presentation at a professional conference or for publication in a

journal accepting undergraduate writing on a literary subject.
CREDIT HOURS: 3
PREREQUISITE COURSES: ENGL 200, ENGL 211, ENGL 400 and 24 additional hours of English course work and permission of the instructor.

HISTORY (HIST) 101 - *World History I*

This course introduces basic historical concepts and seeks to impart information regarding the sweep of human history. Major movements and personalities in world history are highlighted. Further, the course focuses upon the factors which have impacted the development of the major cultures of our world and establishes a foundation for developing an understanding of the forces which continue to shape the modern world.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

HISTORY (HIST) 102 - *World History II*

A continuation of HIST 101. This course will discuss and described the forces that have shaped and developed our world from the year 1650 to the present day.
CREDIT HOURS: 3
PREREQUISITE COURSES: HIST 101.

HISTORY (HIST) 103 - *American History I*

A survey course of United States history. This course will discuss and described the significant events of American History from the discovery to 1876.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

HISTORY (HIST) 104 - *American History II*

This course is a continuation of HIST 103. The significant events of American History from 1876 to the present day will be described and discussed.
CREDIT HOURS: 3
PREREQUISITE COURSES: HIST 103.

HISTORY (HIST) 200 *–Louisiana History*

The course will introduce students to basic Louisiana history.
CREDIT HOURS: 3
PREREQUISITE COURSES: NONE

HISTORY (HIST) 202 – *African-American History*

The course will provide students with an overview of African-American history from the early seventeenth century to the present.
CREDIT HOURS: 3
PREREQUISITE COURSES: NONE

MATHEMATICS (MATH) 011 - *Introduction to Algebra*

The purpose of this course is to provide the student with the computational skills needed to study College Algebra. Problem solving is emphasized throughout the course. This is a one-semester course covering standard topics such as Linear Equations and Inequalities, Polynomials and Factoring, Rational Expressions, Radicals and Complex Numbers, and Quadratic Functions and Inequalities. Placement in MATH 011 determined by ACT/SAT test score.
CREDIT HOURS: 3 - NOT for degree credit.
PREREQUISITE COURSES: None

MATHEMATICS (MATH) 105 - *Applied Finite Mathematics*

This course illustrates contemporary uses of mathematics for students who desire an exposure to mathematics as part of a liberal education. Topics include: Principles of Reasoning, Basic Statistics, Exponential growth and decay, Measurement/Unit Analysis, Mathematical Modeling, and Financial Management.
CREDIT HOURS: 3
PREREQUISITE COURSES: Completion of Math 011. Placement determined by ACT/SAT test score.

MATHEMATICS (MATH) 112 - *College Algebra*

The purpose of college algebra is to provide the student with computational skills needed to solve a variety of problems. The student will see a wide range of techniques and strategies applied to problem solving. Problem solving is emphasized throughout the course. This is a one semester course covering such standard topics as functions and graphs, polynomial functions, graphs and zeros, rational functions and conic sections, exponential and logarithmic functions, and systems of equations and inequalities. Placement in MATH 112 determined by ACT/SAT test score.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

MATHEMATICS (MATH) 120 - *Plane Trigonometry*

This course will be presented through the use of cooperative and interactive learning. Critical thinking and open-ended questions and explorations will be used when appropriate. Problem solving will be emphasized throughout the course. This

is a one semester course covering such standard topics as: trigonometric functions and identities, inverse trigonometric functions, graphs, solving triangles and equations, complex numbers and polar coordinates. Students will study the definitions of the trigonometric functions. Relationships between trigonometric functions will be studied as identities are established. The identities are particularly needed by students going on to a course in calculus. Graphs will give a geometric representation for both trigonometric and inverse trigonometric functions.
CREDIT HOURS: 3
PREREQUISITE COURSES: MATH 112.

MATHEMATICS (MATH) 250 - *Calculus*

This course will provide an introduction to differential and integral calculus for students majoring in life sciences (Biology, Medicine) and behavioral sciences. The topics will include: limits, the first and second derivative, the first and second derivative tests for relative extrema, the definite and indefinite integral, and the Fundamental Theorem of Calculus. Calculus will be used to solve real world problems, including those associated with the interpretation of medical and biological data. A graphing calculator is required for this course (TI - 83 is recommended).
CREDIT HOURS: 3
PREREQUISITE COURSES: MATH 112.

MATHEMATICS (MATH) 252 - *General Statistics*

This course introduces the students to both descriptive and inferential statistics. Emphasis is placed on applications of making decisions in the presence of uncertainty. In order to provide hands on experiences to the students, a number of activities will be made available. Central to this package are the classroom lectures and discussions and tutoring sessions with the instructor. The classroom activities will include computer demonstrations. This is a one semester course providing an introduction to standard topics such as the organization of data, measures of central tendency and dispersion, probability, probability distributions for discrete and continuous random values, the normal distribution, statistical inference, the standard normal distribution, Chi-square distribution, inference concerning two population parameters, regression and correlation, analysis of variance, and nonparametric statistics.
CREDIT HOURS: 3
PREREQUISITE COURSES: MATH 112.

MATHEMATICS (MATH) 253 - *General Statistics Laboratory*

Computer laboratory for Mathematics 252. Students work and complete problem assignments, etc., for MATH 252, General Statistics. Tutorials will be presented.
CREDIT HOURS: 1 (Class meets 3 hrs per week).
PREREQUISITES: MATH 212.
COREQUISITES: MATH 252.

MUSIC (MUSI) 100 - *Music Appreciation*

This course provides the student with the tools for understanding the interaction of music and civilization from a historical perspective. To better relate to the vast body of literature basic concepts of music are taught and the student is given the terminology needed to make cogent commentary on the music of different eras. The discussion includes references to the visual arts and aspects of history as they relate to the development of music through the ages. The theoretical study is supplemented by the use of audio and audiovisual technology. Course sessions are interactive, incorporating lectures, discussions, and listening sessions. Attendance at two (or more) live concerts is required during the semester.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

MUSIC (MUSI)/ENGL 330 - *Literature and Music*

This course examines the relationship of the literary and music arts. Comparative study focuses upon various practices, critical theories, and social, historical, and philosophical concepts that cross artistic boundaries and influence specific works of literature and/or music. Class sessions will include lectures, discussions, films and audio presentations. Group activities will also be utilized. Critical thinking is encouraged as students apply concepts to analysis of fiction, poetry, and musical compositions from Western and Non-Western cultures. One analytical research paper and several short class presentations are required. The course is team taught by both English and music faculty. Credit may be earned for either ENGL 300 or MUSI 330 but not for both.
CREDIT HOURS: 3
PREREQUISITE COURSES: MUSI 100. ENGL 200 recommended.

PHILOSOPHY (PHIL) 200 **-** *Philosophy and Critical Thinking*

Critical thinking is a course designed to enable the student to take charge of his/her life. This course will encourage the development of critical thinking skills and abilities, fair-mindedness, intellectual humility, and intellectual integrity among other

virtues. The approach will be practical yet based on philosophical tenets that have been proven through the ages as essential components for the development of core values and virtues in the thinking human being.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

PHILOSOPHY (PHIL) 270 - *Current Moral Problems*

The course will attempt to provide a Philosophical underpinning to current moral problems. Accordingly, we will deal with values, with the good and bad, with right and wrong, insofar as they apply to urgent issues in the contemporary world milieu. The issues that we will Agrapple with are: world poverty, the environment, euthanasia, abortion, sex, personal relationships, equality and discrimination, criminal rights, business ethics, crime and punishment, Adirty politics, and war and peace. How are we to live our lives as moral human beings in dealing with these issues? The latter will be the fundamental challenge of this course.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

PHILOSOPHY (PHIL) 272 - *Ethical Issues in Health Care*

This course is about applied ethics in various professional health care fields. Ethics is that branch of Philosophy that seeks to determine how human actions may be judged right or wrong. It is concerned with how a human life ought to live. The goal of this course is to study the obligations of Health Care Professionals to themselves, towards their patients, and towards society as a whole. This will be accomplished by studying the foundational principles of Health Care Ethics and dealing with ethical problems inherent in Health Care.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

PHYSICAL SCIENCE (PHSC) 100 - *Physical Science*

This course investigates the physical science of measurement, vectors, kinematics, Newton's law of motion, wave motion, temperature, electric fields and currents and optics. Fundamentals of classical physical science are discussed. Considerable emphasis is placed on radiation and radiobiology.
CREDIT HOURS: 3
PREREQUISITE COURSES: MATH 112.

PHYSICS (PHYS) 121 - *General Physics I*

Students will study and investigate the fundamentals of mechanics, heat and sound.
CREDIT HOURS: 3
PREREQUISITE COURSES: Mathematics 112.
COREQUISITE COURSES: Physics 123.

PHYSICS (PHYS) 122 - *General Physics II*

Students will study and investigate the fundamentals of electricity, magnetism and light.
CREDIT HOURS: 3
PREREQUISITE COURSES: PHYS 121, PHYS 123.
COREQUISITE COURSES: PHYS 124.

PHYSICS (PHYS) 123 - Laboratory for PHYS 121

Selected laboratory investigations related to mechanics, heat and sound will be performed by students. Lab experiments are designed to support lecture.
CREDIT HOURS: 1 (Lab meets three hours per week.).
PREREQUISITE COURSES: MATH 112.
COREQUISITE COURSES: PHYS 121.

PHYSICS (PHYS) 124 - *Laboratory for PHYS 122*

Selected laboratory investigations related to electricity, magnetism and light will be performed by students. Lab experiments are designed to support lecture.
CREDIT HOURS: 1 (Lab meets three hours per week.).
PREREQUISITE COURSES: PHYS 121, PHYS 123.
COREQUISITE COURSES: PHYS 122.

PSYCHOLOGY (PSYC) 100 - *Introductory Psychology*

This course involves a survey of the major fields of psychology. These include understanding, predicting controlling and motivating human behavior. Topics in experimental psychology are presented. Techniques for psychological testing and measurement are evaluated.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

PSYCHOLOGY (PSYC) 230 - *Psychology Across the Life Span*

Study of the development of behavior and psychological processes throughout the prenatal period, infancy, childhood, adolescence, maturity and old age with emphasis on the normal person. Classroom activities will include lecture, group discussions, demonstrations, individual projects, video presentations, library assignments and research projects.
CREDIT HOURS: 3
PREREQUISITE COURSES: PSYC 100.

PSYCHOLOGY (PSYC) 240 - *Theories of Personality*

This course introduces a variety of theoretical approaches to the understanding of personality. It will include psychodynamic, behavioral, social learning, trait, humanistic, cognitive and biological perspectives. Consideration is both biological and environmental determinants of personality.
CREDIT HOURS: 3
PREREQUISITE COURSES: PSYC 100.

PSYCHOLOGY (PSYC) 325 - *Child Psychology*

This course will describe the physical, psychosocial, intellectual, and moral development of an individual from birth to adolescence.
CREDIT HOURS: 3
PREREQUISITE COURSES: PSYC 100, PSYC 230.

PSYCHOLOGY (PSYC) 335 - *Abnormal Psychology*

This course is designed to increase the student's understanding about the dynamics of abnormal disorders or psychological origin. An overview of the historical perspectives of abnormal; psychology will be presented. Students will be provided with an opportunity to explore and discuss etiologies, symptomatologies, and treatments of psychological disorders.
CREDIT HOURS: 3
PREREQUISITE COURSES: PSYC 100, PSYC 230.

PSYCHOLOGY (PSYC) 350 - *Psychology of Adolescence*

Study of the period from puberty to adulthood with an exploration of physical, cognitive, and psychosocial development. Focus will be on theories, empirical findings, and concerns of adolescence. Topics will include: 1) parent-peer relationships; 2) education; 3) identity formation; 4) sexuality; drugs; and mental health issues.
CREDIT HOURS: 3
PREREQUISITES: PSYC 100; PSYC 230.

PSYCHOLOGY (PSYC) 360 - *The Psychology of Aging*

This course will describe the psychological theories, issues and research findings on late adulthood. The focus will be on successful aging.
CREDIT HOURS: 3
PREREQUISITE COURSES: PSYC 100, PSYC 230.

PSYCHOLOGY (PSYC) 420 - *Neuropsychopharmacology*

The content of this course is derived from: 1) neuroanatomy; 2) neurophysiology; 3) pathophysiology; 4) biochemistry; 5) pharmacology; and the 6) behavioral sciences. Emphasis is placed on the neurobiological processes underlying psychopathology and the pharmacological interventions indicated for treatment and management of mental illness.
CREDIT HOURS: 3
PREREQUISITE COURSES: 12 Credit Hours of PSYC; 12 Credit Hours of ARTS, HUMN, PHIL. Also, 12 Credit Hours of BIOL.

RELIGIOUS STUDIES (RELS) 200 - *An Introduction to Religious Studies*

The purpose of this course is to acquaint students with certain issues in religious studies. Three such issues have been specifically identified for this course: 1) the philosophical foundations for a critical analysis of religion; 2) the foundations of Christianity; 3) and a cross-cultural examination of the major world religions. By selecting these three issues, it is intended that students will become sensitive to the philosophical nature and presuppositions of many religious claims, to the origin of Christianity and Christian beliefs about Jesus, and to the unique, as well as common perspectives of the major world religions.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

RELIGIOUS STUDIES (RELS) 100 - *Introduction to Theology*

This survey course introduces students to the basic divisions in the discipline of Theology and Religious Studies. Accordingly, it will present methods for the study of sacred scripture, the historical development of Judeo-Christian Theology, Systematic Theology, Religion and the Social Sciences, Religion and the Personality sciences, Spirituality, and the role of Liturgical Ritual, the Arts and Worship in the human expressions of Religion.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

RELIGOUS STUDIES (RELS) 101 - History of Christianity

This is a survey course that presents an overview of the historical context, background and perspective of Christianity from its origins, though the early churches, up to the end of Vatican Council II in 1965.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

RELIGIOUS STUDIES (RELS) 300 - *The Parables of Jesus*

A detailed study of the cultural, societal, economic, political, and religious background against which Jesus proclaimed the Gospel through parables. The purpose of this course is to immerse students in a hearing of Jesus' parables from the perspective of 1st Century Palestine against which backdrop Jesus proclaimed the Good News of the imminent coming of the Kingdom of God. This course represents a challenge to the Christian believer to radically clarify his/her Christian belief system in the light of Jesus' original, and only authenticated *ippsissimi verbum* (His words itself).
CREDIT HOURS: 3
PREREQUISITES: None

RELIGIOUS STUDIES (RELS) 310 - *Religions of the World*

The primary objective of this course will be to study, compare, and contrast the "great" world religions. These will include: Christianity; Islam; Hinduism; Buddism; Sikhism; Confucianism; Taoism; and Judaism. Lesser know religions will also be studied: Bahai'ism; Jainism; Shintoism; Zoroastrianism.
Note: This course cross registers with ANTH 310
CREDIT HOURS: 3
PREREQUISITE COURSES: None

RELIGIOUS STUDIES (RELS) 355 - *Christian Sacraments*

This course is an experiential approach to the study of Christian sacraments. As Jesus entered fully into human experience, so this course will present the sacraments as touchstones for Divine encounters in daily living. We will take each of the seven sacraments and study their origin, Medieval synthesis, evolution, and current practices.
CREDIT HOURS: 3
PREREQUISITES: None

RELIGIOUS STUDIES (RELS) 400 - Spirituality, Prayer and Healing

A theoretical and experiential study of the relationship between spirituality, methods of prayer, and their practical application in physiological and psychological healing of people who are suffering in any way.
CREDIT HOURS: 3
PREQUISITIES: RELS 100, ENGL 101

SOCIOLOGY (SOCI) 100 - *Introductory Sociology*

This course is designed to provide an introductory review of sociology and the "sociological perspective," which can be thought of as one of many perspectives people might take in exploring and understanding human-beings. The primary goal of the course is to stimulate thinking and to apply the "sociological perspective" to relevant issues and concerns facing us as individuals as well as future health care practitioners.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

SOCIOLOGY (SOCI) 300 - *Sociology of the Family*

This course will explore sociological perspectives on marriage and the family with emphasis on issues facing contemporary American families. Topics include: family forms, marriage, communication, domestic violence, division of labor in the family, work and family relations, child rearing, divorce and re-marriage.
CREDIT HOURS: 3
PREREQUISITE COURSES: SOCI 100.

SOCIOLOGY (SOCI) 301 - *Sociology of Deviance and Crime*

Deviance and crime are important topics in contemporary sociology. This course will examine deviance, deviant behavior, and social control with an emphasis on problems facing contemporary American society. The first part of the course explores how we define deviance and the theories used to explain it. Part two will focus on types of deviance including crime, mental illness, and juvenile delinquency. Part three examines the approaches to social control (incarceration, decarceration, rehabilitation) and the problems associated with it.
CREDIT HOURS: 3
PREREQUISITE COURSES: SOCI 100.

SOCIOLOGY (SOCI) 374 - *Dying and Death*

This course explores the social, psychological, and cultural aspects of dying and death in our society. Emphasis is placed on our role as professionals and health care providers, with the intent to educate and develop personal insight and skills necessary to assist patients, families and colleagues with the various aspects of dying and death. The course utilizes both didactic and experiential teaching methods to establish a better understanding and ability to cope with this life process, both as individuals and as professionals.
CREDIT HOURS: 3
PREREQUISITE COURSES: SOCI 100.

SOCIOLOGY (SOCI) 380 - *Medical Sociology*

Course is designed to understand the relationship between sociology and medicine. Methods will be described and discussed in which sociological concepts and perspectives can be used to increase our knowledge of health and illness. The social structure of the health care system will be elaborated. The relationships between sociological, cultural factors, and health, disease, etc. will be discussed.
CREDIT HOURS: 3
PREREQUISITE COURSES: SOCI 100.

SOCIOLOGY (SOCI) 400 - *Sociology of Health and Medicine*

This course examines sociological perspectives on health and illness as well as social problems in the context of contemporary health care in the United States. Topics include: the definition of health and illness, social responses to illness, social stratification and health, and the perceived crisis in American health care and biomedical technology.
CREDIT HOURS: 3
PREREQUISITE COURSES: SOCI 100.

SOCIOLOGY (SOCI) 401 - *Sociology of Race, Class, and Gender*

The main objective of this course is to investigate the institutional arrangements and cultural patterns that underlie gender, race, and class-based inequalities in American Society. In the process, we will repeatedly return to the central question: In what ways are race, class, and gender interrelated such that they appear in the experiences and "life chances" of individuals in different social locations at different points in time?
CREDIT HOURS: 3
PREREQUISITE COURSES: SOCI 100.

SPANISH (SPAN)101 - *Elementary Spanish I*

This entry-level course introduces students to the basic lexicon and structures of Spanish. Emphasis is on communicative language. For students with no previous study of Spanish.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

SPANISH (SPAN) 102 - *Elementary Spanish II*

A continuation of SPAN 101. Emphasis is on communicative language use.
CREDIT HOURS: 3
PREREQUISITES: SPAN 101.

SPANISH (SPAN) 201 - *Intermediate Spanish I*

This course builds upon skills introduced in elementary Spanish. Emphasis is on reading and writing.
CREDIT HOURS: 3
PREREQUISITE COURSES: SPAN 101, SPAN 102.

SPANISH (SPAN) 202 - *Intermediate Spanish II*

This course is a continuation of SPAN 202. Emphasis is on reading and writing.
CREDIT HOURS: 3
PREREQUISITE COURSES: SPAN 101, SPAN 102, SPAN 201.

SPEECH (SPCH) 100 - *Fundamentals of Speech*

This course studies the factors that govern good speech content and delivery. The course introduces students to speech behavior in human interaction. Students will learn to deliver and prepare a quality speech.
CREDIT HOURS: 3
PREREQUISITE COURSES: None

Clinical Programs Course Offerings And Descriptions

Clinical Laboratory Sciences — Associate of Science Degree

CLINICAL LABORATORY SCIENCE S (CLST) 100 - *Introduction to Medical Laboratory Sciences*

This introductory course covers the admission and medical requirements for entrance into the CLST program. Career guidance and career development are addressed. The design of the lab and function of the CLST are described in detail.
CREDIT HOURS: 1
PREREQUISITES: None

CLINICAL LABORATORY SCIENCES (CLST) 101 - *Introduction to Laboratory Techniques*

The theory and practice of laboratory safety, math, and quality control are included in the first few weeks of this course. Principles and procedures for laboratory instruments such as the microscope, the spectrophotometer, the fluorometer, and the pH meter are covered next. Methods such as immunoassay, chromatography, and electrophoresis are studied and practiced.
CREDIT HOURS: 3
PREREQUISITES: CHEM 101, MATH 112

CLINICAL LABORATORY SCIENCE S (CLST) 200 - *Phlebotomy*

This course is designed to expose the student to the knowledge and skills necessary to function safely and effectively as a phlebotomist. The definition, purpose and professional aspects of phlebotomy are included in the course content. The course describes the proper phlebotomy collection, equipment, and methods of patient identification, and techniques for routine and special procedures. Complications associated with the collection process are listed and discussed. Both the student laboratory and the clinical component of the course are designed to develop proper phlebotomy skills.
CREDIT HOURS: 1
PREREQUISITES: None

SUMMER COURSES

CLINICAL LABORATORY SCIENCES (CLST) 203 - *Special Laboratory Topics I*

Topics covered in this laboratory course are phlebotomy and body fluids. The body fluids topics includes morphology and physiology of the renal system and the theories associated with formation of synovial fluid, serous fluid, spinal fluid, semen, feces and the biochemical analyses of urine and other body fluids. The phlebotomy section includes the purpose and practice of phlebotomy as well as the proper collection containers, phlebotomy equipment, methods of patient identification, phlebotomy procedure for both routine and special procedures, and complications that may occur.

CREDIT HOURS: 2
PREREQUISITES: BIOL 211, BIOL 280, BIOL 281, CHEM 102, CHEM 103, CLST 101
COREQUISITES: CLST 204

CLINICAL LABORATORY SCIENCES (CLST) 204 - *Special Laboratory Topics II*

The disciplines covered in this course are immunology, mycology, and parasitology. Immunology will cover the basic mechanisms and physiological theories of immunity, principles of clinical immunological methods, pathology and clinical correlations of immune system dysfunctions. Lectures will discuss innate resistance, compliment, phagocytosis, acquired immunity, B-cells and immunoglobulins, CMI and T-cells, and antigen recognition. Lab exercises will consist of demonstrations of immune functions and selected immunological procedures. Mycology lectures will discuss specimen preparation, culture conditions, macroscopic and microscopic morphology, biochemical and serological reactions, pathology of human mycoses and antimycotic therapy. The lab exercises will consists of demonstrations of macroscopic and microscopic morphology, biochemical and serological reactions, pathology of human mycoses and antimycotic therapy. The lab exercises will consist of demonstrations of macroscopic and microscopic morphology, biochemical and serological reactions, and fungal stains. Parasitology lectures will discuss specimen preparation, staining procedures, life cycles, macroscopic and microscopic morphology, and pathology of parasitic diseases. Lab exercises will demonstrate stains and macroscopic and microscopic parasite morphology.

CREDIT HOURS: 2
PREREQUISITES: BIOL 211, BIOL 280, BIOL 281, CHEM 102, CHEM 103, CLST 101
COREQUISITES: CLST 203

FALL COURSES

CLINICAL LABORATORY SCIENCE S (CLST) 210 - *Immunology and Immunohematology*

This course includes the basic principles and applications of blood bank immunology, the ABA system, the Rh system, other blood groups, compatibility testing, antibody identification, quality control, hemolytic disease of the newborn, apheresis, blood components and derivatives and transfusions complications. The lab covers basis principles and procedures of blood bank.
CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204
COREQUISITES: CLST 211, CLST 212, CLST 213

CLINICAL LABORATORY SCIENCES (CLST) 211 - *Clinical Chemistry I*

This lecture includes math and quality control, the principles of laboratory instrumentation, and the biochemistry of chemical substances affecting health and disease. The laboratory covers the principles and practice of methods used to identify and quantitate chemical substances measured in the clinical lab.
CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204
COREQUISITES: CLST 210, CLST 212, CLST 213

CLINICAL LABORATORY SCIENCES (CLST) 212 - *Hematology I*

This lecture course explores the maturation, morphology, pathology, and destruction of erythrocytes, white blood cells, and platelets. The Hemostasis component includes lecture on the three components of normal coagulation: platelets, blood vessels, and factors. The laboratory includes practice of hand cell counts, white cell differentials, and other selected hematological and coagulation tests.
CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204
COREQUISITES: CLST 210, CLST 211, CLST 213

CLINICAL LABORATORY SCIENCE S (CLST) 213 - *Clinical Microbiology I*

This course covers the morphology and structure of microorganisms. The diseases and methods of identification are covered for selected organisms. The lab includes the techniques of isolation handling specimens, sterilization, and antibiotic treatment, biochemical testing, and infection control procedures.
CREDIT HOURS: 4

PREREQUISITES: CLST 203, CLST 204
COREQUISITES: CLST 210, CLST 211, CLST 212

SPRING COURSES

These courses involve a clinical experience in the hospital lab.

CLINICAL LABORATORY SCIENCES (CLST) 220 - *Clinical Practicum I*

This course includes a one week rotation in phlebotomy and a three week clinical rotation in a hospital immunohematology laboratory. It covers the principles and practices of serology, blood donor screening and collection, component preparation and blood blanking.
CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204, CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLST 221, CLST 222, CLST 223

CLINICAL LABORATORY SCIENCE S (CLST) 221 - *Clinical Practicum II*

This four week clinical rotation in a clinical chemistry hospital laboratory covers the principles and operation of multi channeled chemistry analyzers, spectrophotometers, osmometers and Cotlove titrators. The application and theories of analytical methodologies are included in this course.
CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204, CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLST 220, CLST 222, CLST 223

CLINICAL LABORATORY SCIENCE S (CLST) 222 - *Clinical Practicum III*

This four week rotation in a clinical Hematology hospital laboratory covers the practices and theories of Hematology, Hemostasis, and Body Fluids. The principles and operations of Hematology, Hemostasis and Body Fluid analyzers are included in this course.
CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204, CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLST 220, CLST 221, CLST 223
CLINICAL LABORATORY SCIENCES (CLST) 223 - *Clinical Practicum IV*

This four week rotation in a clinical Microbiology hospital laboratory includes Microbiology, Parasitology, Mycology, and Virology. Included are the specimen collection, handling and preparation and principles of certain biochemical methods of detection.

CREDIT HOURS: 4
PREREQUISITES: CLST 203, CLST 204, CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLST 220, CLST 221, CLST 222

CLINICAL LABORATORY SCIENCES (CLST) 224 - *Clinical Practicum I*

This clinical practicum is only for students who have a baccalaureate degree form a regionally accredited institution and successful completion of 16 semester hours in chemistry to include one semester of organic and/or biochemistry. These Students must be enrolled in the Bachelor of Science Degree program in Clinical Laboratory Sciences. This course is a four week rotation that includes three weeks in the immunohematology laboratory and one week learning and practicing phlebotomy. The course content entails the principles and practices of serology, blood donor screening and collection, component preparation and blood blanking, and the principles and practice of phlebotomy.

CREDIT HOURS: 2
PREREQUISITES: B.S. degree in Science, CLST 203, 204, 210, 211, 212, 213, and approval of the Director Clinical Laboratory Sciences

CLINICAL LABORATOARY SCIENCES (CLST) 225 - *Clinical Practicum II*

This clinical practicum is only for students who have a baccalaureate degree from a regionally accredited institution and successful completion of 16 semester hours in biological sciences to include general microbiology, pathogenic microbiology, and immunology and 16 semester hours in chemistry to include one semester of organic and/or biochemistry. These students must be enrolled in the Bachelor of Science Degree program in Clinical Laboratory Sciences. The course encompasses a four week clinical rotation in chemistry hospital laboratory. During this rotation, the student will explore the principles and operation of multi channeled chemistry analyzers, spectrophotometers, osmometers, fluorometer, and instruments for electrochemical analyses. The application and theories of analytical methodologies are included in this course.

CREDIT HOURS: 2
PREREQUISITES: B.S. degree in Science, CLST 203, 204, 210, 211, 212, 213, and approval of the Director Clinical Laboratory Sciences

CLINICAL LABORATORY SCIENCES (CLST) 226 - *Clinical Practicum III*

This clinical practicum is only for students who have a baccalaureate degree from a regionally accredited institution and successful completion of 16 semester hours in biological sciences to include general microbiology, pathogenic microbiology, and immunology and 16 semester hours in chemistry to include one semester of organic and/or biochemistry. The student must be enrolled in the Bachelor of Science Degree program in Clinical Laboratory Sciences. This four week rotation in a clinical Hematology hospital laboratory covers the practices and theories of Hematology, Hemostasis, and Body Fluids. The principles and operations of Hematology, Hemostasis and Body Fluid analyzers and included in this course.

CREDIT HOURS: 2

PREREQUISITES: B.S. degree in Science, CLST 203, 204, 210, 211, 212, 213, and approval of the Director Clinical Laboratory Sciences

CLINICAL LABORATORY SCIENCE S (CLST) 227 - *Clinical Practicum IV*

This clinical practicum is only for students who have a baccalaureate degree from a regionally accredited institution and successful completion of 16 semester hours in biological sciences to include general microbiology, pathogenic microbiology, and immunology and 16 semester hours in chemistry to include one semester of organic and/or biochemistry. These students must be enrolled in the Bachelor of Science Degree program in Clinical Laboratory Sciences. This four week rotation in a clinical Microbiology hospital laboratory includes Microbiology, Parasitology, Mycology, and Virology. Included are the specimen collection, handling and preparation, and principles of certain biochemical methods used in the detection of microorganisms.

CREDIT HOURS: 2

PREREQUISITES: B.S. degree in Science, CLST 203, CLST 204, CLST 210, CLST 211, CLST 212, CLST 213, and approval of the Director of Clinical Laboratory Sciences.

COREQUISITES: None

Bachelor of Science in Clinical Laboratory Sciences

CLINICAL LABORATORY SCIENCES (CLSS) 406 - *Laboratory Management*

The dynamics of the health care delivery systems and how they affect laboratory services are addressed in this course. Critical pathways, clinical decision making,

and performance improvement are discussed as they relate to the principles of laboratory operations. Other topics examined in this course include the theories and practices of clinical laboratory supervision involving personnel, motivation, performance evaluation, recruitment, and selection of employees. Other human resource issues include the utilization of personnel, the analysis of workflow, and staffing patterns. The principles and practices of quality assurance as they apply to laboratory services are examined. The paradigms for workload, profit and loss, cost and reimbursements, and materials and inventory management are included in the financial management lectures. Methods of preparing for laboratory and hospital accreditations are important aspects of the course, as well as complying with government standards that apply to laboratory practices. Legal and ethical issues facing laboratory personnel are presented in case study format.
CREDIT HOURS: 3
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 407, CLSS 408

CLINICAL LABORATORY SCIENCES (CLSS) 407 - *Pathophysiology and Laboratory Diagnosis*

This is a 9 hour course that includes 6 hours of lecture and 3 hours of laboratory, participation in which is mandatory. The lectures are centered on individual diseases of anatomic systems, including, but not limited to, the following: central nervous system, cardiovascular system, viral hepatitis, arthritides, lipid metabolism, autoimmune diseases, endocrinopathies, cancer, genetic diseases and chromosomal abnormalities. Lectures will compare and contrast the normal anatomy an physiology with the abnormal states associated with human disease. The lecture will then identify laboratory tests needed to the diagnose the disease state, and demonstrate why the tests are useful.

During the student laboratory, students will have the opportunity to perform many of these tests on normal and abnormal patient specimens received from the OLOLRMC pathology laboratory. The laboratory will also instruct students in the analysis and interpretation of the data collected. Because students have received prior instruction in the basic laboratory analyses in the CLST curriculum, and emphasis will be placed on molecular methodologies.
CREDIT HOURS: 9
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 406, CLSS 408

CLINICAL LABORATORY SCIENCES (CLSS) 408 - *Laboratory Education*

The educational topics examined in this course include teaching and learning strategies, student diversities, instructional design, competency-based education, and laws involving education. Bloom's taxonomy levels are used to develop objectives and test questions. Behavioral objectives are developed using Roger Marger's format. The course participants are required to develop and design projects involving the educational issues presented in the course.

CREDIT HOURS: 2
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 406, CLSS 407

CLINICAL LABORATORY SCIENCES (CLSS) 415 - *Independent Study in Clinical Laboratory Science*

Independent Study is designed to allow the Clinical Laboratory Science student to pursue scholarly activity in his/her area of interest; therefore, the actual course content will vary according to each individual student's interest and career goals. Student activities in CLSS 415 may include, but are not limited to: (1) writing topical research papers; (2) writing grants; (3) performing research projects; (4) presenting lectures to CLT students; and (5) participating in continuing education seminars. Students will be allowed to pursue interests in one of the following areas: (1) clinical laboratory science education; (2) laboratory management; (3) hematology/oncology; (4) biochemistry; (5) blood/tissue banking; (6) microbiology; or (7) cytogenetics/ genetics/molecular biology. *Independent Study* will re-enforce the concepts presented in CLSS 410, 411, 412, and 413 and will better prepare the student for the challenges of the clinical practicums CLSS 420, 421, 422 and 423. The purpose of this course is to provide an interest-specific curriculum that will provide the student with knowledge and experience that will facilitate the pursuit of their career goals.

CREDIT HOURS: 2
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 414

CLINICAL LABORATORY SCIENCES (CLSS) 420 - *Clinical Practicum IV*

Clinical Practicum IV is the counterpart to CLSS 410, Molecular Biology and Genetics. The course is composed of several clinical rotations relating to immunohe-

matology and genetic diseases with an emphasis on diagnosis by molecular methods. One week will be spent in a hospital laboratory in each of the following areas: immunogenetics, cytogenetics, molecular biology and management of the clinical molecular biology laboratory.
CREDIT HOURS: 3
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 421, CLSS 422, CLSS 423

CLINICAL LABORATORY SCIENCES (CLSS) 421 - *Clinical Practicum V*

This practicum is the clinical component of CLSS 411 and consist of management based projects that affect the operation of a clinical chemistry laboratory. These projects include implementing a quality control program for a clinical chemistry laboratory, evaluating new instruments and procedures, designing a procedure manual, evaluating CAP criteria, developing a budget, and developing an instrument maintenance system.
CREDIT HOURS: 3
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 420, CLSS 422, CLSS 423

CLINICAL LABORATORY SCIENCES (CLSS) 422 - *Clinical Practicum VI*

This practicum is the clinical component of CLSS 412. The course includes techniques of recognizing and counting abnormal blood cells on bone marrow and peripheral blood smears. The results are then evaluated and related to the appropriate hematological diseases. The course includes competency in staining and evaluating blood cells using the flow cytometer as well as the fluorescent microscope. Coagulation factor analyses are performed and results are evaluated and related to corresponding pathological conditions.
CREDIT HOURS: 3
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 420, CLSS 421, CLSS 422

CLINICAL LABORATORY SCIENCES (CLSS) 423 - *Clinical Practicum VII*

Clinical Practicum VII is the counterpart to CLSS 413, Advanced and Molecular Microbiology. The course is composed of several clinical rotations relating to Clinical Microbiology with an emphasis on identification/diagnosis by molecular methods. One week will be spent in a hospital laboratory in each of the following areas: virology, bacteriology (does not include routine culture/identification/susceptibility testing), mycology and management of the clinical microbiology laboratory.
CREDIT HOURS: 3
PREREQUISITES: CLST 210, CLST 211, CLST 212, CLST 213
COREQUISITES: CLSS 420, CLSS 421, CLSS 422

HEALTH SERVICE ADMINISTRATION (HSER) 320 - *Health Care Systems and Trends I*

The course is an introduction to the health care delivery system in the United States. Classes will be conducted as forums of discussion emphasizing contemporary issues related to health care professionals, facilities, organization patterns, reimbursement and quality of care.
CREDIT HOURS: 3
PREREQUISITES: Junior standing or permission of instructor.

HEALTH SERVICE ADMINISTRATION (HSER) 340 - *Health Care Systems and Trends II*

The course is an analysis of administrative structures and inter-organizational arrangements among hospitals and other health care organizations. Issues for institutional, community and home settings for chronic care as well as services to the poor are addressed. Issues and problems related to the design, implementation, and evaluation of quality assessment and risk management programs in acute and non-acute health care settings are also discussed. The role of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and federal legislation in the development of quality assessment and risk management are also covered.
CREDIT HOURS: 3
PREREQUISITES: HSER 320

HEALTH SERVICE ADMINISTRATION (HSER) 350 - *Introduction to Health Service Administration*

Introduction to the principles for management for organizations that deliver health care services such as hospitals, nursing homes, multi-specialty clinics, and home health care agencies. Concepts and theories from the general management literature that are particularly helpful in organization and management of health care organizations will be surveyed.
CREDIT HOURS: 3
PREREQUISITES: Junior standing or permission of instructor.

HEALTH SERVICE ADMINISTRATION (HSER) 360 - *Health Care Economics*

The health care economy is of special interest because of its size in the US economy and because of the profound effect that health and the lack of health can have on every individual. This course provides a focused look at the economics of

the health sector and the major issues that motivate the current attempts at health care reform.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350

HEALTH SERVICE ADMINISTRATION (HSER) 380 - *Accounting for Health Service Management*

Review of standard accounting techniques and applications to reimbursement structures, regulatory mechanisms, cost control and budgeting. Applications to health service administration.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 350

HEALTH SERVICE ADMINISTRATION (HSER) 410 - *Health Care Financial Management*

This course will review the financial issues in reimbursement structures, regulatory mechanisms, cost control and budgeting as it relates to health care.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350, HSER 360, HSER 380

HEALTH SERVICE ADMINISTRATION (HSER) 420 - *Managed Care and Insurance*

This course is designed to introduce the student to managed care as it exists in various forms in the United States today. The course includes a discussion of managed care structures, products, methods of reimbursement, and contracting enrollees, network providers, and/or services. The role of the health care administrator and the responsibilities of those under administrative span of control in a managed care environment are presented and illustrated through exercises and discussion.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350, HSER 360, HSER 380

HEALTH SERVICE ADMINISTRATION (HSER) 430 - *Health Care Marketing*

This course covers market research, strategy, and the strategic marketing process. Students will be introduced to the process of the development of marketing strategies and analysis in a health care setting. Topics include pricing, communication, distribution channels, and client motivation and services.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350

HEALTH SERVICE ADMINISTRATION (HSER) 440 - *Legal Aspects of Health Service Administration*

This course is an introduction to the law as it relates to health care settings. It provides an overview of health care law aimed at assisting students in developing an intuitive sense for what the laws will permit them to do, and for when to consult legal counsel. Unit Topics such as contracts, negligence, damages, workers compensation, litigation and trial proceedings will be covered.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350, HSER 360, HSER 380

HEALTH SERVICE ADMINISTRATION (HSER) 450 - *Health Policy*

This course will consider major aspects of the American health care policy system and changes in that system, their impact upon health services organizations, and appropriate administrative strategies for responding to those changes.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350

HEALTH SERVICE ADMINISTRATION (HSER) 460 - *Managerial Epidemiology*

The overall goal of this course is to increase the health professional's ability to analyze problems and make decisions based on application of epidemiological concepts and methods in a variety of settings and across a spectrum of disease topics. Social, physical and biological determinants of disease will be examined, and the epidemiology of selected infectious and chronic diseases will be studied in greater depth. Epidemiological tools to be presented include use of vital statistics, rates, and methods of descriptive, observational and experimental studies.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 360

HEALTH SERVICE ADMINISTRATION (HSER) 470 - *Seminar in Health Service Administration*

This course will integrate theory and practice by examining issues and solutions to problems in the management of health services organizations. It functions as a capstone for the health services administration program, allowing students to apply coursework from across the curriculum.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350, HSER 360, HSER 380, HSER 410, HSER 430

HEALTH SERVICE ADMINISTRATION (HSER) 480 - *Health Care Information Systems*

Survey of the technology and processes used in management information systems. Role of management information systems in health care organizations.
CREDIT HOURS: 3
PREREQUISITES: HSER 320, HSER 340, HSER 350, HSER 360, HSER 380

HEALTH SERVICE ADMINISTRATION (HSER) 491 - *Internship/Practicum*

Placement in a health care agency and completion of a project in one or more areas of health service administration. Seminars for participant presentations will be conducted.
CREDIT HOURS: 1-6
PREREQUISITES: HSER 320, HSER 340, HSER 360, HSER 380

Emergency Health Science— Associate of Science Degree

EMERGENCY HEALTH SCIENCE (EMHS) 101 - *Basic Emergency Medical Care*

This lecture and laboratory course is the foundation course upon which the Emergency Medical Technician - Paramedic program is based. The course includes recognition of signs and symptoms of illness or injury through patient assessment. Treatment choices based on the findings of the patient assessment are introduced. Instruction includes the use of a variety of pieces of equipment and emergency medical care techniques. Students are given an opportunity to handle and practice application of oxygen delivery devices, splinting and immobilization materials, methods of controlling bleeding, selected assisted medication administration, and the semi-automatic external defibrillator. Safe movement and transportation of patients is also practiced. Upon completion of this course, the student has the opportunity to obtain certification as a Nationally Registered Emergency Medical Technician - Basic.
CREDIT HOURS: 5
PREREQUISITES: BIOL 210

Paramedic Level EMHS Courses

SUMMER COURSES

EMERGENCY HEALTH SCIENCE (EMHS) 104 - *Advanced Paramedic Skills*

This course is designed to introduce the paramedic student to the advanced skills necessary to treat life-threatening medical and traumatic emergencies. Skills learned at the basic level are used as a foundation to build upon for this course. Students are instructed in patient assessment, advanced airway management, medication administration, and circulatory management including intravenous and intraosseous initiation. The cardiac skills of ECG monitoring, defibrillation, cardioversion, and non-invasive external cardiac pacing are presented. This course will include both lecture and laboratory sessions.
CREDIT HOURS: 2
PREREQUISITES: All General Studies Courses in EHS Curriculum, EMHS 101
COREQUISITES: EMHS 108, EMHS 110

EMERGENCY HEALTH SCIENCE (EMHS) 108 - *Introduction to Advanced Emergency Care*

This lecture course is designed to introduce the practice of an Emergency Medical Technician - Paramedic. Students are instructed in the roles responsibilities, operations equipment, and medical/legal considerations of a paramedic. An overview

of the human systems are presented to prepare the student for further coursework while emphasizing the use of proper medical terminology. A history of the Emergency Medical Service profession is also presented in this course.
CREDIT HOURS: 2
PREREQUISITES: All General Studies Courses in EHS Curriculum, EMHS 101
COREQUISITES: EMHS 104, EMHS 110

EMERGENCY HEALTH SCIENCE (EMHS) 110 - *Emergency Pharmacology*

This lecture course will provide the paramedic student with a study of pharmacological interventions utilized by emergency medical services. General pharmacology, routes of administration, actions, indications, cotraindications, side effects, and dosages of commonly used emergency drugs are presented. The physiological impact of these drugs on the whole organ system is emphasized.
CREDIT HOURS: 3
PREREQUISITES: All General Studies Courses in EHS Curriculum, EMHS 101
COREQUISITES: EMHS 104, EMHS 108

FALL COURSES

EMERGENCY HEALTH SCIENCE (EMHS) 200 - *Cardiac-Pulmonary Emergencies*

This lecture and laboratory course presents the pathophysiology, assessment, and current treatment modalities for the pre-hospital cardiac respiratory patient. The lecture emphasizes recognition and etiology of life-threatening cardio-pulmonary emergencies. The laboratory segment will present the skills of assessment, treatment, and pharmacological interventions for which the student must show proficiency in prior to performing them in the clinical setting.
CREDIT HOURS: 4
PREREQUISITES: Summer semester EMHS courses
COREQUISITES: EMHS 202, EMHS 204, EMHS 206, EMHS 208

EMERGENCY HEALTH SCIENCE (EMHS) 202 - *Care of Trauma Patients*

This lecture and laboratory course presents the pathophysiology, assessment, and current treatment modalities for the pre-hospital patient with traumatic injuries. Discussions include the kinematics of trauma, burn management, and multisystems trauma. Emphasis is placed on the advanced skills of triage, injury prioritization, and fluid resuscitation. The basic skills of trauma care is also reviewed.
CREDIT HOURS: 4
PREREQUISITES: Summer semester EMHS courses
COREQUISITES: EMHS 200, EMHS 204, EMHS 206, EMHS 208

EMERGENCY HEALTH SCIENCE (EMHS) 204 - *Medical Emergencies*

This lecture and laboratory course presents the pathophysiology, assessment, and current treatment modalities for the pre-hospital medical emergency patient. The lecture emphasizes the physiological changes that occur with the most common medical emergencies. Medical situations related to drug abuse and overdose, diabetes, cerebral vascular accident, anaphylaxis, poisoning, acute abdomen, infectious disease, epilepsy and other nervous system disorders are studied. A special section dealing with behavioral emergencies and crisis intervention will be covered.
The laboratory segment presents the assessment, treatment, and pharmacological interventions, which the student must show proficiency in prior to performing them in the clinical setting.
CREDIT HOURS: 4
PREREQUISITES: Summer semester EMHS courses
COREQUISITES: EMHS 200, EMHS 202, EMHS 206, EMHS 208

EMERGENCY HEALTH SCIENCE (EMHS) 206 - *OB/Pediatric Emergencies*

This lecture and laboratory course presents the obstetrical, gynecological, and pediatric emergency patient in the pre-hospital setting. Evaluation of obstetrical/ gynecological disorders are reviewed. The management of the expectant mother, complications of labor, and normal/abnormal delivery are discussed. Pediatric medical and traumatic emergencies are presented in addition to considerations concerning sexual assault and child abuse.
CREDIT HOURS: 2
PREREQUISITES: Summer semester EMHS courses
COREQUISITES: EMHS 200, EMHS 202, EMHS 204, EMHS 208

EMERGENCY HEALTH SCIENCE (EMHS) 208 - *Advanced Clinicals*

A clinical practicum at approved hospital departments designed to provide the student with patient care experience. This course will provide the student with opportunities to apply advanced skills under precepted conditions to patients of various ages. Departments include but are not limited to: emergency department, intensive care, labor and delivery, pediatrics, psychiatry, and anesthesia.
CREDIT HOURS: 3
PREREQUISITES: Summer semester EMHS courses
COREQUISITES: EMHS 200, EMHS 202, EMHS 204, EMHS 206

SPRING COURSES

EMERGENCY HEALTH SCIENCE (EMHS) 210 - *Patient Care Internship*

A field internship with approved local paramedic level ambulance services designed to provide the student with pre-hospital patient care experience. Field internship begins following successful completion of Fall semester coursework and all hospital clinical experience.
CREDIT HOURS: 8
PREREQUISITES: Fall semester EMHS courses
COREQUISITES: EMHS 219, EMHS 220

EMERGENCY HEALTH SCIENCE (EMHS) 216 - *Paramedic Transition*

This course is designed to be an independent self-study course for those students with current National Registry Emergency Medical Technician - Paramedic certification. The EHS Program Director determines research content after assessment and interview with the student. Upon successful completion of this course, the student may receive credit for Summer and Fall EMHS courses.
CREDIT HOURS: 1
PREREQUISITES: All EMHS required General Studies courses
COREQUISITES: EMHS 212, EMHS 219, EMHS 220

EMERGENCY HEALTH SCIENCE (EMHS) 219 - *EMS Operations*

This lecture course introduces the paramedic student to concepts related to the daily operations of EMS systems. Principles and methods used in the supervision of personnel within EMS systems are presented. Budgeting and financial skills necessary to manage emergency health systems are discussed. Case studies, group assignments, and research papers are utilized in addition to lecture content.
CREDIT HOURS: 3
PREREQUISITES: Fall semester EMHS courses
COREQUISITES: EMHS 210, EMHS 212, EMHS 220

EMERGENCY HEALTH SCIENCE (EMHS) 220 - *Paramedic Special Skills*

This lecture and laboratory course serves as the forum for which special skills associated with EMS can be presented. The course will serve as a comprehensive review of the didactic material and clinical skills introduced during the paramedic program in order to prepare the student for certification testing. Non-traditional skills as well as special considerations in pre-hospital care are presented through

discussions and research papers. The scope-of-practice of the EMT-Paramedic is revisited and possible future changes discussed.
CREDIT HOURS: 4
PREREQUISITES: Fall semester EMHS courses
COREQUISITES: EMHS 210, EMHS 212, EMHS 219

PHYSICAL THERAPIST ASSISTING — Associate of Science Degree

PHYSICAL THERAPIST ASSISTING (PTAP) 100 — *Introduction to Patient Care*

This course introduces basic information regarding the health care system in general and the profession of physical therapy, in order to explore physical therapist assisting as a career choice. Emphasis is placed on the provision of physical therapy services, the history and scope of the practice of the physical therapist and the physical therapist assistant, factors influencing the delivery of service, relationships and communication with patients and other health care providers, professional behaviors and legal and ethical issues related to health care. Guest lecturers and panels will provide insight into health care from current practitioners. The student will gain an understanding of the professional responsibilities inherent in providing health care and learn basic concepts of developing provider relationships.
CREDIT HOURS: 1
PREREQUISITES: None.

SUMMER COURSES

PHYSICAL THERAPIST ASSISTING (PTAP) 200 — *Introduction to Health Care*

This course is designed to give the physical therapist assistant student fundamental understanding of the provision of health care. Emphasis is placed on provision of physical therapy services, scope of practice of the physical therapist assistant and the physical therapist, factors influencing the delivery of service, relationships and this clinical course offers the student an opportunity for an individualized concentrated nursing practicum in an area related to the student's special interest. The student in collaboration with the faculty and a clinical preceptor will develop a project designed to enhance professional nursing practice. The student is expected to synthesize knowledge from previous nursing experiences.

This course should be taken during the semester that the student intends to graduate.
CREDIT HOURS: 3
PREREQUISITES: Level III NURS courses; NURS 410, NURS 420, NURS 430 previous or concurrent enrollment or with permission of the Dean of Nursing.

PHYSICAL THERAPIST ASSISTING (PTAP) 211 - *Functional Anatomy and Kinesiology*

This course is designed to provide the potential physical therapist assistant student a fundamental understanding of the musculoskeletal system as it applies to movement. Emphasis is placed on muscles and muscle groups, their origins and insertions, innervations, movements, posture and gait. The student has the opportunity to learn characteristics and components of normal movement as a basis for understanding abnormal movement.
PREREQUISITES: BIOL 210
COREQUISITE: PTAP 213
CREDIT HOURS: 3

PHYSICAL THERAPIST ASSISTING (PTAP) 212 - *Clinical Science I*

This course is designed to give the physical therapist assistant student the opportunity to learn and practice fundamental assessments, patient care skills and procedures. Students are instructed in assessments, skills and procedures and they then perform them in the laboratory setting with student to student practice. Students must demonstrate competency in performing these skills, procedures and assessments in the laboratory setting prior to performing them in a clinical setting.
CREDIT HOURS: 2
PREREQUISITES: All General Studies Courses in PTA curriculum, PTAP 100
COREQUISITES: PTAP 200, PTAP 211, PTAP 213

PHYSICAL THERAPIST ASSISTING (PTAP) 213 - *Functional Anatomy and Kinesiology Lab*

This laboratory course is designed to coincide with the Functional Anatomy and Kinesiology lecture course. Course content follows the content presented in lecture and provides the student the opportunity to apply concepts of movement to the human anatomy through lab activities incorporating palpation, movement and problem solving. Students analyze movement in individual regions of the body and demonstrate comprehension through written and practical applications.
PREREQUISITES: BIOL 210
COREQUISITE: PTAP 211
CREDIT HOURS: 1

FALL COURSES

PHYSICAL THERAPIST ASSISTING (PTAP) 221 - *Clinical Science II*

This course is designed as a continuation of PTAP 212. Lecture and laboratory experiences are combined to instruct the student in assessment and treatment

procedures utilized in current physical therapy practices. Emphasis is placed on the treatment procedures involved in therapeutic massage, hydrotherapy, wound care, electrical modalities, edema control, orthotics, gait dysfunction, prosthetics and traction within the scope of practice of the physical therapist assistant. The student will incorporate assessments and treatment modalities learned in the previous courses, with those learned in this course, to demonstrate competency in the provision of total patient treatment. Laboratory experiences will provide the opportunity to experience and to practice these procedures. Competency inperformance of the procedures will be determined by skill check-off and by practical demonstration in competency utilizing patient scenarios.

CREDIT HOURS: 3
PREREQUISITES: Summer PTAP courses.
COREQUISITES: PTAP 222, PTAP 224, PTAP 226, PTAP 228

PHYSICAL THERAPIST ASSISTING (PTAP) 222 - *Clinical Science III*

This therapeutic exercise course combined lecture and laboratory experiences to introduce the physical therapist assistant student to exercise as a treatment procedure. The student will learn about exercise from the cellular to the systemic effects. Emphasis is placed on various kinds of exercise, application of exercise technique and on special areas of therapeutic exercise. The student will practice range of motion exercise, stretching techniques, mobilization within the scope of the PTA practice, resistance, traction and aerobic exercise and pulmonary hygiene techniques. Assessments and procedures learned in previous classes will be utilized in combination with various exercise procedures in order to enhance rehabilitation and monitor subject response to the procedures.

CREDIT HOURS: 4
PREREQUISITES: Summer PTAP courses.
COREQUISITES: PTAP 220, PTAP 224, PTAP 226, PTAP 228

PHYSICAL THERAPIST ASSISTING (PTAP) 224 - *Neuromusculoskeletal Dysfunction*

This lecture course introduces the student to injuries, diseases and conditions that affect the neuromusculoskeletal system, and which are primary to the practice of physical therapy. A system approach to understanding the function of the human body and the effect of pathological entities on the system are presented. Emphasis is placed on the course and effect of the pathological condition; the signs and symptoms of the pathology; the general effect on human performance and function of the

patient; and, the physical therapy management of the condition and patient. The student is provided the opportunity to identify potential medical complications that effect physical therapy interventions and the patient's safe response to the intervention.
CREDIT HOURS: 3
PREREQUISITES: Summer PTAP courses.
COREQUISITES: PTAP 220, PTAP 222, PTAP 226, PTAP 228

PHYSICAL THERAPIST ASSISTING (PTAP) 225 - *Neurophysiology of Rehabilitation*

This course is designed to give the physical therapist assistant student a fundamental understanding of the nervous system and its association to movement and movement dysfunction. Neuroscience from the perspectives of anatomy and physiology is explored.
The student has the opportunity to learn the relationship of the nervous system to control of normal movement and movement dysfunction. Emphasis is placed on the use of correct terminology, neuromuscular function and rehabilitation of movement dysfunction.
CREDIT HOURS: 1
PREREQUISITES: PTAP 200, PTAP 211, PTAP 212, PTAP 213

PHYSICAL THERAPIST ASSISTING (PTAP) 226 - *Human Development*

This lecture course introduces the student to the development of cognition, speech and movement. The student has the opportunity to learn the relationship of the areas of the developmental process. Although focused on development from neonatal through early childhood, the student will be introduced to the changes that occur in aging throughout life. Emphasis is placed on the developmental sequence, developmental disabilities and adaptive equipment.
CREDIT HOURS: 1
PREREQUISITES: Summer PTAP courses.
COREQUISITES: PTAP 220, PTAP 222, PTAP 224, PTAP 228

PHYSICAL THERAPIST ASSISTING (PTAP) 228 - *Clinical Education I*

This course is designed to provide the opportunity for the student to apply previously learned assessments, procedures and skills to direct patient care under the supervision of a licensed practitioner of physical therapy. The student will participate in two different full time two week affiliations. Each student is assigned to a clinical instructor, who is primarily responsible for planning clinical experiences

reflective of course objectives and current practice, evaluation of student performance and providing immediate feedback to facilitate learning. The student will have the opportunity to master skills learned in the laboratory setting and integrate behaviors reflective of professional competency within the scope of practice of the physical therapist assistant.
CREDIT HOURS: 4
PREREQUISITES: Summer PTAP courses.
COREQUISITES: PTAP 220, PTAP 222, PTAP 224, PTAP 226

SPRING COURSES

PHYSICAL THERAPIST ASSISTING (PTAP) 231 - *Clinical Science IV*

This course is designed to provide a forum by which PTA students can integrate didactic and clinical experiences in the development of skills relative to the practice of physical therapy. The student will have the opportunity to prepare for entry-level employment in physical therapy, and will be introduced to issues and topics relative to the practice of physical therapy, which are considered post-graduate level skill development. These include topics in specialty areas of physical therapy practice, alternative therapeutic approaches to patient care, and advanced techniques in musculoskeletal and neuromuscular dysfunction. Projects and laboratory experiences provide the opportunity for the student to gain an introductory knowledge and application base upon which clinical skills are developed.
CREDIT HOURS: 2
PREREQUISITES: Fall PTAP courses.
COREQUISITES: PTAP 238

PHYSICAL THERAPIST ASSISTING (PTAP) 239 - *Clinical Education II*

This clinical education course involves assignment of the student to two different full time affiliations totaling eleven weeks. The student will have the opportunity to apply all treatment procedures, assessments and patient care skills necessary for entry level competency for the practice of physical therapist assisting. The longer assignments allow the student to follow patients through the course of therapy in order to observe changes in patient function in response to treatment. The student will have the opportunity to integrate knowledge and skills to master critical skills, analyze patient response to treatments, participate as a member of the health care team, participate in patient, family and staff teaching activities, and model professional behaviors. Upon completion of this course, the student will have demonstrated all critical skills necessary for entry level competency of a practitioner of physical therapist assisting.
CREDIT HOURS: 10
PREREQUISITES: Fall PTAP courses.
COREQUISITES: PTAP 230

Radiologic Technology — Associate of Science Degree
Level I

RADIOLOGIC TECHNOLOGY (RADT) 101 - *Introduction to Radiography*

An introduction to the principles and practices of radiology; historical and professional evolution, status of the health care delivery system, medicolegal and ethical considerations, medical communications, organization and operation of a radiology department, the imaging process and equipment, radiographic preparation and examinations, basic principles of radiation safety, and management techniques of the patient during radiologic procedures. Learning activities include demonstrations, video presentations and the use of computerized programs in patient care management in the learning resources center.
CREDIT HOURS: 3
COREQUISITES: ACSM 100, BIOL 210, MATH 112, RADT 111, RADT 141

RADIOLOGIC TECHNOLOGY (RADT) 111 - *Image Production I*

A study of radiation concepts with related practical application; x-ray properties, basic x-ray equipment, principles of x-ray production, x-ray interactions, prime factors of exposure, exposure calculations, image receptors and accessory devices, components of radiographic quality, technique charts, characteristics of film, intensifying screens, grids, filtration, beam restriction, technique manipulation, exposure control systems, and technical factors that influence and control image production and quality. Learning activities include: interactive video presentations, demonstrations with phantoms, experiments in the radiographic laboratories, and computerized programs in the principles of image production in the learning resources center.
CREDIT HOURS: 3
COREQUISITES: ACSM 100, MATH 112, RADT 101, RADT 141

RADIOLOGIC TECHNOLOGY (RADT) 141 - *Radiographic Practicum*

Supervised clinical experiences designed to provide students with a fundamental understanding of the actual practice of radiology. Instruction in positioning and basic imaging principles and considerations, terminology, anatomy and radiographic examination and evaluation of the upper extremity, shoulder girdle, lower extremity, pelvis and upper femora, bony thorax and thoracic viscera; emphasis on operation of equipment, performance of darkroom and office procedures, patient care management, communication skills, application ofradiationprotection precautions, and the general radiographic process. Learning activities include: demonstrations, interactive

video and slide presentations, film evaluation sessions, the use of computerized programs, models, skills practice with a phantom in the radiographic laboratories, and skills performance in the actual clinical setting.
CREDIT HOURS: 5
PREREQUISITES: Admission to the Rad Tech associate degree program; Current CPR-C certification
COREQUISITES: ACSM 100, BIOL 210, MATH 112, RADT 101, RADT 111

RADIOLOGIC TECHNOLOGY (RADT) 110 - *Radiographic Procedures*

A study of radiographic procedures with related positioning and anatomy. Emphasis on the vertebral column, abdomen, surgical, and trauma radiography, fluoroscopic and contrast media examinations. Cranial topography and morphology, radiography of the cranial, facial, nasal, and temporal bones, zygomatic arches, paranasal sinuses, orbits, optic foramen, mandible and temeromandibular joints with film evaluation and interpretation is also included. Learning activities include: demonstrations, interactive video presentations, the use of computerized programs, models, review of radiographs for anatomy, technical and positioning accuracy, and skills practice with a phantom in the radiographic laboratories.
CREDIT HOURS: 3 (2 lecture; 1 lab)
PREREQUISITES: ACSM 100, BIOL 100, MATH 112, RADT 101, RADT 111, RADT 141
COREQUISITES: BIOL 211, ENGL 101, RADT 112, RADT 142

RADIOLOGIC TECHNOLOGY (RADT) 112 - *Image Production II*

This course is a continuation of RADT 111. The technical factors and variables that affect the photographic and geometric quality of an image are analyzed. The course examines the methods of processing with related practical application; design and construction requirements for development and viewing areas; film holders, film handling and storage, latent image formation; automatic processor equipment, system components, cycles, chemistry, processor monitoring and preventative maintenance; quality assurance/control testing programs, silver recovery, sensitometry, artifacts, evaluation of image quality, exposure conversions. Learning exercises include experiments in the radiographic laboratories and sensitometric measurements and processor monitoring involving the use of the radiographic darkroom equipment. The use of computerized programs and interactive video available in the learning resources center are integrated into the course.
CREDIT HOURS: 3

PREREQUISITES: ACSM 100, BIOL 210, MATH 112. RADT 101, RADT 111, RADT 141
COREQUISITES: BIOL 211, ENGL 101, RADT 110, RADT 142

RADIOLOGIC TECHNOLOGY (RADT) 142 - *Radiographic Practicum*

Supervised clinical performance of basic skills with more emphasis on preparation of the patient, room, and equipment for fluoroscopic, mobile, surgical, emergency/trauma and general radiographic procedures, including film evaluation. Continued development and application of clinical competencies. Learning activities include: demonstrations, film evaluation sessions, skills practice with a phantom in the radiographic laboratories, and skills performance in the actual clinical setting.
CREDIT HOURS: 6
PREREQUISITES: ACSM 100, BIOL 210, MATH 112, RADT 101, RADT 111, RADT 141 and current CPR-C Certification
COREQUISITES: BIOL 211, ENGL 101, RADT 110, RADT 112

RADIOLOGIC TECHNOLOGY (RADT) 123 - *Radiation Protection & Radiobiology*

A study of radiation protection safety practices and radiobiology; Emphasis on units of measurement, radiation quantities and units, detection devices, cellular components, radiation effects, dose limits and calculations, protective measures, equipment and shielding design; federal and state regulations governing radiation protection. Learning activities include the use of interactive video and computerized programs available in the learning resources center.
CREDIT HOURS: 2
PREREQUISITES: LEVEL I Semesters I and II Radiologic Technology courses
COREQUISITES: PHSC 100, RADT 143.

RADIOLOGIC TECHNOLOGY (RADT) 143 - *Radiographic Practicum*

Continued development and application of clinical competencies with emphasis on precautions in patient care and performance of general radiographic procedures, emergency/trauma, mobile, surgical, fluoroscopic and contrast media procedures, and corresponding film evaluation. Learning activities include: demonstrations, film evaluation sessions, skills practice with a phantom in the radiographic laboratories, and skills performance in the actual clinical setting.
CREDIT HOURS: 3
PREREQUISITES: LEVEL I Semester I and II Radiologic Technology courses and current CPR-C Certification
COREQUISITES: PHSC 100, RADT 123

Level II

RADIOLOGIC TECHNOLOGY (RADT) 214 - *Special Imaging Technology*

A study of the fundamental principles of special imaging techniques and equipment with emphasis on radiographic equipment and accessory devices, x-ray circuitry and rectification, image intensified fluoroscopy, body section radiography, macroradiography, mammographic equipment, exposure control systems and devices, stereoscopy digital imaging, thermography, cine, mobile equipment, duplication, evaluation of radiographic equipment; uses of the computer in the radiology department. Introduction to specialized imaging and therapeutic equipment including MRI, CT, US, PET, radiation therapy and nuclear medicine technologies. Learning activities include: library assignments, videos, computerized programs available in the learning resources center, and individual research projects. Application of computer technology as it relates to radiology information systems are available in the radiology department.

CREDIT HOURS: 3
PREREQUISITES: LEVEL I Radiologic Technology courses.
COREQUISITES: PSYC 100, RADT 220, RADT 241

RADIOLOGIC TECHNOLOGY (RADT) 220 - *Advanced Radiographic Procedures*

An examination of radiographic anatomy, advanced positioning and patient care methods with related imaging equipment. Emphasis on basic pharmacology, venipuncture, advanced contrast media examinations, pelvimetry, mammography, computed tomography, scanograms, pediatric radiography, foreign body localization, advanced imaging studies of all body systems, including cross-sectional anatomy presentations. Learning activities include: demonstrations, interactive video presentations, the use of computerized programs, models, review of radiographs for anatomy positioning and technical accuracy, review of cross-sectional images, and skills practice with a phantom in the radiographic laboratories.

CREDIT HOURS: 3
PREREQUISITES: LEVEL I Radiologic Technology courses.
COREQUISITES: PSYC 100, RADT 214, RADT 241

RADIOLOGIC TECHNOLOGY (RADT) 241 - *Radiographic Practicum*

Continued participation and application of general radiographic procedures, emergency/trauma, mobile, surgical, fluoroscopic procedures, contrast media

administration and examinations, angiography, patient care procedures, film evaluation, and quality control testing; introduction to CT, and MRI. Learning activities include: demonstrations, film evaluation sessions, equipment monitoring, skills practice with a phantom in the radiographic laboratories, and skills performance in the actual clinical setting with emphasis on special imaging modalities.
CREDIT HOURS: 6
PREREQUISITES: LEVEL I Radiologic Technology courses and current CPR-C Certification
COREQUISITES: PSYC 100, RADT 214, RADT 220

RADIOLOGIC TECHNOLOGY (RADT) 230 - *Radiographic Pathology*

A study of medical disease processes and their radiographic manifestations. Emphasis on radiographic anatomy, physiology, pathology, and evaluation of radiographic quality with related exposure considerations. Classroom activities will include: slide presentations, interactive video presentations, review of radiographs for pathological conditions, library assignments, and individual case study projects.
CREDIT HOURS: 2
PREREQUISITES: LEVEL II Semester III Radiologic Technology courses.
COREQUISITES: HUMN elective, RADT 232, RADT 242

RADIOLOGIC TECHNOLOGY (RADT) 232 - *Senior Seminar*

Seminars of topics related to the practice of radiologic technology including written and oral presentations; a review of materials in preparation for the American Registry of Radiologic Technologists Examination. Learning activities will include library assignments, individual projects, the use of computerized programs, videos and laboratory experiments.
CREDIT HOURS: 2
PREREQUISITES: LEVEL II Semester III Radiologic Technology courses.
COREQUISITES: HUMN elective, RADT 230, RADT 242

RADIOLOGIC TECHNOLOGY (RADT) 242 - *Radiographic Practicum*

Advanced integration and application of all clinical skills including production of radiographs of optimal diagnostic quality. Clinical experiences are provided to enable students to manage patients and perform radiographic procedures with proficiency

and using independent judgment. Clinical competencies related to patient preparation and management, room preparation, equipment operation, radiation safety practices, effective communication, performance of radiologic procedures utilizing appropriate supplies and accessory devices, image production, positioning, overall analysis of image quality and structures demonstrated. Elective rotations will be provided in radiation oncology, nuclear medicine, and ultrasound.

CREDIT HOURS: 8

PREREQUISITES: LEVEL II Semester III Radiologic Technology courses and current CPR-C Certification

COREQUISITES: HUMN elective, RADT 230, RADT 232

RADIOLOGIC TECHNOLOGY (RADT) 345 - *Principles of Mammography*

The purpose of this course will prepare the student to enter the advanced practice of mammography. This course consists of didactic and clinical experiences necessary to expose the technologist to the actual practice of screening mammography. This course is not applicable to any of the degree or certificate programs at OLOL College. The study of the fundamentals of mammography. The course will include mammographic imaging of the breast (including the augmented breast), positioning, breast anatomy, breast physiology, pathology, mammographic education/care, instrumentation, techniques, and laboratory/clinical demonstrations. It includes a clinical component in which participants will become skilled in screening mammography. This course will be taught in a condensed format utilizing evenings and weekends. This provides the opportunity for those students who are employed to enroll in this course. The learning activities are designed to enable students to meet course objectives. Learning activities include: demonstrations; the use of computerized programs; review of mammograms for anatomical, positioning, pathological, and technical considerations; skills practice with a phantom in the mammographic laboratory; skills practice in actual clinical setting; and independent study assignment.

This class meets Mammography Quality Standards Act for the FDA.

CREDIT HOURS: 3 - not for degree credit

PREREQUISITES: Must be a registered technologist, registry eligible technologist, or enrolled in the last semester of a radiologic technology program.

RESPIRATORY THERAPY (RESP) 207 - *Cardiopulmonary Pharmacology*

An introductory course which focuses on the pharmacologic modes of action, indications, routes of administration and excretion, side effects, hazards and drug interactions for agents used in the management of patients with cardiopulmonary disease.
CREDIT HOURS: 3
PREQUISITES: None

RESPIRATORY THERAPY (RESP) 210 - *Respiratory Therapy Fundamentals*

This is a lecture/laboratory course that encompasses the basic principles of Respiratory Care. Topics include patient assessment, infection control, respiratory pharmacology, as well as, the theory and application of various types of equipment that are used in the diagnosis and treatment of cardiopulmonary disease. This course also introduces an analytical approach to determining appropriate treatment strategies with oxygen therapy, and teaches the accompanying techniques associated with patient care. The course also includes the theory and application principles behind new and upcoming therapy devices and compares them to practices currently employed in the clinical setting. The laboratory portion offers hands-on practice of therapies and equipment discussed in the lecture portion of the course to prepare the student for clinical rotation.

Topics Addressed: Gas physics / associated equipment; Infection control; Industrial oxygen production and storage; Oxygen delivering devices; Patient assessment; Oxygen therapy; Respiratory pharmacology; Therapeutic equipment; Charting protocols; Cardiopulmonary resuscitation; Artificial airways; Airway management.
CREDIT HOURS: 5
LECTURE/LAB: Lecture = 3 hours (56 contact hours); Laboratory = 2 hours (28 contact hours)
PREREQUISITES: MATH 112, BIOL 210, PHYS 121

RESPIRATORY THERAPY (RESP) 211 - *Clinical Applications and Procedures I*

Introductory course designed to provide clinical instruction in respiratory care procedures. Emphasis is placed on routine patient care, including such modalities as patient assessment, medical gas therapy, use of aerosol, humidity devices, bronchial hygiene, and chest physical therapy.
CREDIT HOURS: 4
CLINIC: Clinic = 4 hours (192 contact hours)
PREREQUISITES: RESP 210

RESPIRATORY THERAPY (RESP) 212 - *Cardiopulmonary Physiology*

This lecture series addresses the physiology of the cardiovascular and pulmonary systems. The course is designed to demonstrate the application of cardiopulmonary physiological principles in practice of medicine. Discussions focus on the regulation and maintenance of cardiopulmonary function under normal conditions. The course also provides an introduction to the integrative control of the cardiopulmonary function. Topics Address: Mechanics of breathing; Alveolar ventilation; Pulmonary blood flow; Ventilation / perfusion; Diffusion and transport of gases; Acid-Base balance; Control of breathing; Clinical correlation to pulmonary function testing; Congestive heart failure; Electrophysiology of the heart; Cardiac cycle; Hemodynamics; Clinical correlation to cardiopulmonary profiles; Peripheral circulation and vascular control; Special circulations; Integrative control of the cardiovascular system; Clinical correlation to the cardiopulmonary response to stress.
CREDIT HOURS: 3
LECTURE/LAB: Lecture = 3 hours (45 contact hours)
PREREQUISITES: MATH 112, BIOL 210, PHYS 121

RESPIRATORY THERAPY (RESP) 213 - *Professional Directions*

This course is designed to introduce students to current topics facing allied health practitioners involved in the practice of respiratory therapy. The course will include modules on professionalism, problem-based learning, critical thinking, as well as, ethical and legal issues related to the practice of respiratory therapy.
Topics Addressed: Professionalism; Accreditation, national registries, and state licensure; Introduction to problem based learning and critical thinking; Overview of ethics and legal aspects of health care; Information technology and its application in health care.
CREDIT HOURS: 1
LECTURE/LAB: Lecture = 1 hours (15 contact hours)

RESPIRATORY THERAPY (RESP) 220 - *Critical Care Concepts I*

This lecture series introduces students to the clinical application of respiratory care in critically ill patients. It incorporates the theories and protocols learned in Respiratory Therapy Fundamentals and develops critical care skills, which emphasize ventilatory support modalities, hemodynamic monitoring, metabolic monitoring and patient management techniques.

Topics Addressed: Artificial blood gas procurement and analysis; X-ray interpretation; Hemodynamics; Ventilation and Oxygenation strategies; Ventilator terminology; Ventilator modalities; Introduction to critical care.
CREDIT HOURS: 2
LECTURE/LAB: Lecture = 2 hours (30 contact hours)
PREREQUISITES: RESP 210, RESP 212

RESPIRATORY THERAPY (RESP) 221 - *Clinical Applications and Procedures II*

This course is designed to introduce students to essential concepts related to critical care medicine. Emphasis is placed on monitoring techniques, patient weaning and ventilatory support systems.

CREDIT HOURS: 5
CLINIC: Clinic = 5 hours (240 contact hours)
PREREQUISITES: RESP 211

RESPIRATORY THERAPY (RESP) 222 - *Cardiopulmonary Pathophysiology*

This course provides a review of the most common diseases that affect the cardiovascular and pulmonary systems. It includes discussions on clinical diagnostic techniques and treatment approaches commonly used in the management of patients with cardiopulmonary disease. The course also utilizes case studies in a problem-based learning format to teach students critical thinking skills that are required to successful treat patients with diseases of the heart and lungs.

Topics Addressed: Medical history and physical examination; Pulmonary function testing; Cardiopulmonary profiles; Clinical Laboratory Assessment; Chest Roentgenology; Case Management of patient with respiratory disease; Chronic Bronchitis and Emphysema; Asthma; Sleep Apnea; Cystic Fibrosis; Pneumonia; Acquired Immunodeficiency Syndrome; Tuberculosis; Pulmonary Embolism and Infarction; Case Studies - Infectious Diseases; Diseases of the Pleura and Chest Wall; Neurological Disorders; Pneumoconiosis and COPD; Smoke and Thermal Injuries; ARDS.

CREDIT HOURS: 2
LECTURE/LAB: Lecture = 2 hours (30 contact hours)
PREREQUISITES: RESP 210, RESP 212

RESPIRATORY THERAPY (RESP) 230 - *Critical Care Concepts II*

A continuation of Critical Care Concepts I with furthered emphasis on adult critical care ventilatory support modalities. Coursework covers intermediate and advanced pulmonary care strategies. It encompasses patient management through a problem-based learning format. It also incorporates new advances in critical care procedures and a broadened approach to patient care beyond primary pulmonary diseases.

Topics Addressed: Patient assessment; Pulmonary inspection; Breathing patterns; Endotracheal Intubation; Bedside diagnostics; Breathing techniques; Mechanical Ventilation; Critical care protocols and procedures.

CREDIT HOURS: 2
LECTURE/LAB: Lecture = 2 hours (45 contact hours)
PREREQUISITES: RESP 220

RESPIRATORY THERAPY (RESP) 231 - *Clinical Applications and Procedures III*

Students are provided clinical instruction in advanced respiratory care procedures. Emphasis is placed on therapeutic strategies that are used in adult and neonatal critical care. Students also actively participate in experiences in cardiopulmonary rehabilitation and long term care of patients with cardiopulmonary disease.
CREDIT HOURS: 5
CLINIC: Clinic = 5 hours (240 contact hours)
PREREQUISITES: RESP 221

RESPIRATORY THERAPY (RESP) 232 - *Neonatology and Pediatrics*

Lecture series encompassing the therapeutic approach to treatment of neonates and pediatric patients. Addresses the unique characteristics of both the cardiovascular and pulmonary systems for patients from birth to age twelve. Discusses the parameters of disease states specific to this age group, including diagnostic and management differences. Teaches the physiological changes during gestation in relation to pulmonary management at premature birth and into recovery, as well as acute resuscitation protocols. Mechanical ventilation modalities traditional to adult care are applied to this age group, and new modalities are discussed. Topics Addressed: Patient assessment; Pediatric neuromuscular disease; Asthma / Bronchiolitis; Epiglottitis / Croup / Foreign object aspiration; Cystic Fibrosis; Sleep Apnea / Pneumonia / Drowing; Pulmonary development; Cardiovascular development; Transition of newborns; Prenatal history and patient assessment of the neonate; Asphyxia; Resuscitation; Cardiovascular Defects: Acyanotic and Cyanotic; Respiratory Defects; Respiratory Distress Syndrome; Transient tachypnea of the newborn; B Streptococcal infections; Meconium aspiration syndrome; Patent Ductus Arteriosus; Apnea of prematurity; Conven
CREDIT HOURS: 2
LECTURE/LAB: Lecture = 2 hours (30 contact hours)
PREREQUISITES: RESP 210, RESP 212, RESP 220

RESPIRATORY THERAPY (RESP) 233 - *Cardiopulmonary Rehabilitation and Long Term Care*

This course is designed to introduce students to the care of chronically ill patients. Discussions will focus on the delivery of respiratory care services for hospital-based cardiopulmonary rehabilitation programs, extended care facilities, and home care. Topics include clinical exercise testing, exercise prescriptions, and clinical practice guidelines for management of patients who require long term respiratory care (e.g., oxygen therapy, bronchodilatory therapy, mechanical ventilation, etc.). Topics Addressed: Clinical exercise testing; Exercise prescriptions; Case

Management of patient with chronic respiratory disease; Respiratory care procedures used in alternate care settings.
CREDIT HOURS: 3
LECTURE/LAB: Lecture = 3 hours (45 contact hours)

RESPIRATORY THERAPY (RESP) 234 - *Pulmonary Diagnostic Testing*

This course covers basic instrumentation and diagnostic techniques employed in the assessment of pulmonary functions. It includes interpretive analysis of test results as related to disease states and other abnormal lung conditions and provides information regarding the appropriate strategy for proper patient testing. Students are expected to apply their understanding of pulmonary physiology to the selection of appropriate testing techniques and equipment. Topics Addressed: Lung Volumes and Capacities; Diagnostic Equipment; Ventilation and Ventilatory Control Tests; Lung Volume test; Spirometry and Pulmonary Mechanics; Gas Distribution and Diffusion Tests; Critical Care Monitoring; Quality Assurance; Collection and evaluation of Clinical History and Case Studies; Sleep Studies; Bronchoscopy; Metabolic Measurements; PFT in Children and Adolescents; Computer Systems.

RESPIRATORY THERAPY (RESP) 235 - *Cardiopulmonary Resuscitation and Advanced Cardiac Life Support*

This course is designed to review the most current American Heart Association (AHA) standards for basic life support and advanced cardiac life support. Special emphasis is devoted to the recording and interpretation of electrocardiograms, pharmacologic interventions used in the treatment of cardiac emergencies, and airway management techniques used during cardiopulmonary resuscitation. Students must successfully complete an AHA approved Advanced Cardiac Life Support course.
CREDIT HOURS: 1
LECTURE/LAB: Lecture = 1 hour (15 contact hours)

RESPIRATORY THERAPY (RESP) 235 - *Cardiopulmonary Resuscitation and Advanced Cardiac Life Support*

This course is designed to review the most current American Heart Association (AHA) standards for basic life support and advanced cardiac life support. Special emphasis is devoted to the recording and interpretation of electrocardiograms, pharmacologic interventions used in the treatment of cardiac emergencies, and airway management techniques used during cardiopulmonary resuscitation. Students must successfully complete an AHA approved Advanced Cardiac Life Support course.
CREDIT HOURS: 1
LECTURE/LAB: Lecture = 1 hour (15 contact hours)

Surgical Technology — Associate Degree

SURGICAL TECHNOLOGY (SURT) 110 - *Fundamentals of Surgical Technology*

This course introduces the surgical technology student to the basic principles and practices of surgical technology; historical and professional evolution, basic principles of asepsis and aseptic technique, the role of the surgical technologist, legal and ethical considerations, and equipment and physical features of the operating room. The physical, psychological, and spiritual needs of the patient are discussed. Learning activities include: demonstration, simulations, video presentations and guest speakers from the professional community.
CREDIT HOURS: 6
COREQUISITES: ACSM 100, BIOL 210, BIOL 212, ENGL 101

SURGICAL TECHNOLOGY (SURT) 111 - *Fundamentals of Surgical Technology Skills Lab*

Instruction takes place in a will-equipped skills lab (mock OR). Emphasis is on instrument identification, classification, and use; sterile technique; case sequence - laying out and opening of supplies; skin preparation; surgical scrubbing, gowning, gloving and draping; minor and basic set-ups with count procedures; and post case activities.
CREDIT HOURS: 1
COREQUISITES: SURT 110

SURGICAL TECHNOLOGY (SURT) 120 - *Surgical Procedures I*

Emphasis is placed on basic surgical procedures and related pathology, necessary instrumentation, possible complications, equipment and supplies. Specific areas of content include: pediatric, plastic, oral, general, gastrointestinal, OB/GYN, peripheral and cardiovascular, thoracic, and genitourinary.
CREDIT HOURS: 6
PREPREQUISITES: SURT 110
COREQUISITES: BIOL 100, MATH 112, BIOL 211, BIOL 213

SURGICAL TECHNOLOGY (SURT) 121 - *SKILLS LAB I*

In this lab, students will continue to practice the skills acquired in SURT 111. The focus is on intraoperative activities such as establishing the sterile field at the OR table, passing instruments, loading suture, and dressing application. Students will practice taking vital signs and urinary catheter insertion.
CREDIT HOURS: 1
PREREQUISITES: SURT 110, SURT 111
COREQUESISITES: SURT 120

SURGICAL TECHNOLOGY (SURT) 135 - *Surgical Procedures II*

Comprehensive course focusing on EENT, neurological, and orthopedic surgical procedures with related instrumentation, supplies and equipment.
CREDIT HOURS: 3
PREREQUISITES: SURT 110, SURT 111, SURT 120 SURT 121
COREQUISITES: BIOL 280, BIOL 281

SURGICAL TECHNOLOGY (SURT) 136 - *Skills Lab II*

This lab provides for continued practice of skills from the previous lab course. Intensive focus is on the basic set-up and interoperative competencies. Clinical observation is scheduled for each student and required written assignments are evaluated.
CREDIT HOURS: 1
PREREQUISITES: SURT 110, SURT 111, SURT 120, SURT 121
COREQUISITES: SURT 135

SURGICAL TECHNOLOGY (SURT) 215 - *Surgical Procedures Practicum I*

The student will rotate through the operating rooms at the OLOLRMC, the BRGMC Bluebonnet, and the Woman's Hospital, using and refining the knowledge and skills learned in the 100 level courses. All students during this course must complete clinical summaries for each surgical procedure and must attend a weekly class.
CREDIT HOURS: 7
PREREQUISITES: SURT 110, SURT 111, SURT 120, SURT 121, SURT 135, SURT 136
COREQUISITES: PSYC 100, PHIL 270/272

SURGICAL TECHNOLOGY (SURT) 225 - *Surgical Procedures Practicum II*

The student will rotate through Health South Surgery Center, in addition to the facilities listed in SURT 215. Out of town clinical sites may be offered. The student will continue to utilize and refine the knowledge and skills learned in the 100 level courses. All students during this course must complete clinical summaries for each surgical procedure and must attend a weekly class.
CREDIT HOURS: 9
PREREQUISITES: SURT 110, SURT 111, SURT 120, SURT 121, SURT 135, SURT 136, SURT 215
COREQUISITES: SPCH 100

SURGICAL TECHNOLOGY (SURT) 240 - *Professional Portfolio Self Study Course*

The self-study program is designed only for previous Our Lady of the Lake College students who have completed the Surgical technology Certificate Program at this College. This will capture and document, in a portfolio format, all of the prospective candidate's professional, technical and work related experience since certificate completion and provide comprehensive documentation for assessment and evaluation of the candidate's abilities and aptitudes within the professional field of the Surgical Technologist. This course will be a self-study with periodic sessions with the Surgical Technology Faculty to assure focus, provide guidance and evaluate progress.

Nursing — Associate of Science Degree
Level I

Nursing (NURS) 100 - *Pharmacology in Nursing*

This course focuses on basic principles of pharmacology, drug regulations, major drug classifications, and the registered nurse's role in medication administration. Emphasis is placed on nursing implications of drug therapy, including legal/ethical, psychosocial, developmental, spiritual, and cultural considerations. Students utilize math skills to calculate drug dosages.
CREDIT HOURS: 3 (45 contact hours)
PREREQUISITES: ACSM 100, ENGL 101, MATH 112, BIOL 210, PSYC 100, CHEM 100
COREQUISITES: BIOL 211, BIOL 235, NURS 101, NURS 103

Nursing (NURS) 101 - *Foundations of Nursing*

This course provides the student with foundational knowledge and skills essential to the practice of nursing. Concepts related to nursing as a profession, professional ethics, standards of care, nursing roles, communication, cultural sensitivity, holistic care, nursing process, critical thinking, teaching-learning process, and community are presented. Developmental concepts are discussed with a focus on the elderly adult and the normal process of aging. Students perform basic psychomotor skills in a laboratory setting.
CREDIT HOURS: 3
PREREQUISITES: ACSM 100, ENGL 101, MATH 112, BIOL 210, PSYC 100, CHEM 100
COREQUISITES: BIOL 211, BIOL 235, NURS 100, NURS 103
LECTURE HOURS: 2 (30 contact hours)
LAB HOURS: 1 (45 contact hours)

Nursing (NURS) 103 - *Introduction to Adult Health*

This course introduces the concepts and techniques of interviewing, history taking, review of systems, and physical assessment. Emphasis is placed on the assessment skills necessary to determine the holistic health care needs of the adult client. The course also provides the student with fundamental knowledge of pathophysiological stressors commonly encountered by adults. Enables the beginning student to apply communication skills, cultural sensitivity, nursing process, critical thinking skills, teaching, and psychomotor skills and in acute care and community based settings.

CREDIT HOURS: 4
LECTURE HOURS: 2 (30 contact hours)
LAB HOURS: 2 (90 contact hours)
PREREQUISITES: ACSM 100, ENGL 101, MATH 112, BIOL 210, PSYC 100, CHEM 100
COREQUISITES: BIOL 211, BIOL 235, NURS 100, NURS 101

Nursing (NURS) 105 ***- Adult Health Nursing I***

This course focuses on the role of the nurse in promoting, maintaining, and restoring health for adults with commonly occurring health problems. Students use the nursing process to formulate care plans/maps for individuals experiencing surgery and nutritional, respiratory, cardiovascular, elimination, and endocrine problems. Includes opportunities to continue to develop communication skills, cultural sensitivity, nursing process, critical thinking skills, teaching skills, and psychomotor skills consistent with the role of care provider in acute and community based settings. Students develop beginning collaborative skills with individuals, families, peers, and health care providers in the delivery of nursing care.

Credit Hours: 5
Lecture Hours: 3 (45 contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: Semester 2 Nursing courses
Corequisites: PSYC 230, BIOL 280

Nursing (NURS) 107 - *Mental Health Nursing*

This course focuses on concepts basic to psychiatric-mental health nursing including neurobiology, therapeutic communication, cultural diversity, spirituality, family dynamics, loss and grieving, stress and coping, crisis intervention, violence, abuse, psychiatric disorders, and community resources. Mental health issues across

the life span are explored. The course introduces specialized assessment and communication skills necessary for the care of the individual experiencing situational and maturational stressors as well as mental illness. Clinical experiences provide the student with the opportunity to develop communication skills, cultural sensitivity, nursing process, critical thinking skills, teaching skills, and collaborative skills in acute in-patient, chemical dependency, outpatient, and adolescent units.
Credit Hours: 4
Lecture Hours: 2 (30contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: Semester 2 Nursing Courses
Corequisites: PSYC 230, BIOL 280

Nursing (NURS) 201 - *Adult Health Nursing II*

This course focuses on the role of the nurse in promoting, maintaining, and restoring health for adults with commonly occurring health problems. Students use the nursing process to formulate care plan/maps for individuals experiencing integumentary, musculoskeletal, neurological, sensory, oncological, and hematological problems. Clinical learning experiences in acute and community based settings enable the student to refine communication skills, cultural sensitivity, nursing process, critical thinking skills, teaching skills, psychomotor skills, and collaborative skills.
Credit Hours: 4
Lecture Hours: 2 (30 contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: Semester 3 Nursing Courses
Corequisites: SOC 100

Nursing (NURS) 203 - ***Care of Children and Families***

This course focuses on the physiological, developmental, psychosocial, cultural, and spiritual health care of the child within the family unit. The nursing process, concepts of family dynamics, legal-ethical principles, and community resources are used by the students to promote, maintain, and restore optimum functioning of the family unit. Emphasis is placed on age-related health risks and common childhood health problems. Clinical experiences provide the student with opportunities to refine communication skills, cultural sensitivity, nursing process, critical thinking skills, teaching skills, psychomotor skills, and collaborative skills in acute and community based settings.
Credit Hours: 4
Lecture Hours: 2 (30 contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: Semester 3 Nursing Courses
Corequisites: SOC 100

Nursing (NURS) 205 - ***Care of Women and Neonates***

This course explores the concepts and skills necessary for the nursing care of childbearing families and newborn infants. The childbirth process from conception to postpartum is discussed. The course focuses on the role of the nurse in promoting, maintaining, and restoring health for the childbearing family and newborns including both normal and high risk pregnancy. The course also includes topics related to women's health such as fertility and infertility, complications of menopause, sexually transmitted diseases, and female reproductive cancers. Clinical experiences provide the opportunity to refine communication skills, cultural sensitivity, nursing process, critical thinking skills, teaching skills, psychomotor skills, and collaborative skills.
Credit Hours: 4
Credit Hours: 2 (30 contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: Semester 4 Nursing Courses
Corequisites: NURS 209

Nursing (NURS) 207 - ***Adult Health Nursing II***

This course focuses on the role of the nurse in promoting, maintaining, and restoring health for adults experiencing complex respiratory, cardiovascular, neurological, and metabolic, and renal problems. The course fosters the integration of concepts and skills presented in previous courses. Clinical learning experiences allow the student to apply leadership and management principles to the care of individuals, families, and groups.
Credit Hours: 4
Lecture Hours: 2 (30 contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: Semester 4 Nursing courses
Corequisites: NURS 209

Nursing (NURS) 209 - ***Transition to Practice***

This course focuses on role transition from student nurse to graduate nurse. Emphasis is placed on historical and current issues in nursing and their effect on nursing practice.

The socioeconomic, sociocultural, and political forces influencing nursing practice are explored. The basic principles of leadership and management related to direct patient care are presented. Concepts essential for the beginning nurse such as accountability, professional values, legal-ethical issues, health care delivery systems, health policy, change process, conflict resolution, interdisciplinary collaboration, risk

management, quality improvement, and informational technology are discussed. The course reinforces the importance of professional organizations, professional development, and the use of research to guide nursing practice.
Credit Hours: 3
Lecture Hours: 3 (45 contact hours)
Prerequisites: Semester 4 Nursing courses
Corequisites: NURS 207

Nursing (NURS) 112 - ***LPN - RN Transition Course***

By permission of the Director of Transition Programs
This course is designed to assist the LPN to transition into the ASN curriculum. The course focuses on validating skills and reinforcing knowledge for which advanced placement has been granted. The concepts of nursing process, physical assessment, role transition, professional values, and legal-ethical issues are addressed. Clinical experiences in acute care settings enable the student to apply theory to practice.
Credit Hours: 7
Lecture Hours: 5 (75 contact hours)
Lab Hours: 2 (90 contact hours)
Prerequisites: ENGL 101, MATH 112, BIOL 210, BIOL 211, BIOL 235, BIOL 280, CHEM 100, PSYC 100, PSYC 230

NURSING (NURS) 204 - *Nursing Care of Individuals and Groups*

This course focuses on nursing care of clients experiencing actual or potential health problems in response to alteration in human need fulfillment. Emphasis is on the interactive effects of multiple stressors on the biopsychosocial and spiritual needs of individuals and their families. Role development focuses on integration of all dimensions of the nursing role with emphasis on the manager of care and member of profession. Experiences are provided that enable the student to manage the care of small groups of clients with health problems and related nursing needs. Nursing diagnoses and nursing interventions are presented in relation to the functional health patterns of activity/exercise, nutritional-metabolic, sleep-rest, cognitive-perceptual, and value-belief.
CREDIT HOURS: 10
PREREQUISITES: LEVEL II Semester I Nursing courses.
COREQUISITES: HUMN elective.
THEORY: 75
CLINICAL: 225

NURSING (NURS) 310 - *Health Promotion*

The course emphasizes the nurse's role as a health advocate in assisting individuals, families and groups toward health promotion and well being. The focus will be on strategies of health teaching, the multiplicity of factors affecting health behaviors, current issues that impact health care and the assessment of resources available for health maintenance and disease prevention.
CREDIT HOURS: 3
PREREQUISITES: Level I and Level II Courses in the Associate of Science Degree in Nursing curriculum.

NURSING (NURS) 320 - *Pathophysiology: A Basis for Nursing Care*

Emphasis is on the physiological manifestations, which are the result of pathologic processes. Clinical situations are utilized to incorporate critical thinking, interpretation of data, indicated nursing care and expected patient outcomes. The course builds upon and expands previous nursing knowledge and that gained in anatomy, physiology, microbiology, and nutrition.
CREDITS HOURS: 3
PREREQUISITES: Level I and Level II Courses in the Associate of Science Degree in Nursing curriculum.

NURSING (NURS) 330 - *Health Assessment*

The course prepares the student to use assessment tools and techniques in determining the health status of clients across the lifespan. Students will apply knowledge from health and social sciences and will utilize the critical thinking process as a method to identify appropriate nursing interventions. The course is designed to provide opportunities for enhancing competency in assessment skills, interpretation of diagnostic data and determination of nursing interventions.
CREDIT HOURS: 3
PREREQUISITES: Level I and Level II Courses in the Associate of Science Degree in Nursing.

NURSING (NURS) 340 - *Leadership / Management*

This course presents an introduction to management theories, concepts and skills applicable in all career fields. The management process and the functions of manag-

ers are emphasized along with theories of organizational behavior, leadership, work motivation and the management of human resources. The course will offer opportunities to apply these concepts to health service organizations.
NOTE: This course cross registers with HSER 350 (formerly MGMT 210).
CREDIT HOURS: 3
PREREQUISITES: Level I and Level II Courses in the Associate of Science Degree in Nursing and Math 252.

NURSING (NURS) 350 - *Research in Nursing Practice*

This course provides an introduction to the basic principles of research. Emphasis is placed upon the importance of research to generate nursing knowledge. Students have an opportunity to critique research articles and evaluate their relevance and applicability to nursing practice.
CREDIT HOURS: 3
PREREQUISITE: MATH 252, previous or concurrent enrollment. *Level I and Level II Courses in the Associate of Science Degree in Nursing.

Level IV

NURSING (NURS) 410 - *Gerontology*

This course focuses upon the concept of successful aging and is designed to enhance the nurse's awareness of the needs and potentials of the older adult. The course analyzes the sociological, psychological and physiological aspects of aging. Students will explore theories of aging, chronic and acute problems of the aging client, available community resources and issues impacting health promotion of the older adult.
CREDIT HOURS: 3
PREREQUISITES: Level III NURS courses or permission of the Dean of Nursing.

NURSING (NURS) 420 - *Community Nursing*

This course provides an introduction to the field of community health nursing which includes the conceptual foundations and skills for community nursing practice. The student develops an awareness of the diversity of the roles of nursing in a variety of community settings and has an opportunity to enhance his or her clinical skills.
CREDIT HOURS: 6 (4 theory, 2 clinical)
PREREQUISITES: Level III NURS courses or permission of the Dean of Nursing.

NURSING (NURS) 430 - *Nursing in the 21st Century*

This course explores the changing health care system, its impact upon patient care and relevance to nursing practice. Factors contributing to health care changes in the 21st century will be examined and the nurse's role as patient advocate will be emphasized.
CREDIT HOURS: 3
PREREQUISITES: Level III NURS courses or with permission of the Dean of Nursing.

NURSING (NURS) 440 - *Independent Study*

This clinical course offers the student an opportunity for an individualized concentrated nursing practicum in an area related to the student's special interest. The student in collaboration with the faculty and a clinical preceptor will develop a project designed to enhance professional nursing practice. The student is expected to synthesize knowledge from previous nursing experiences.

This course should be taken during the semester that the student intends to graduate.
CREDIT HOURS: 3
PREREQUISITES: Level III NURS courses; NURS 410, NURS 420, NURS 430 previous or concurrent enrollment or with permission of the Dean of Nursing.

Health Career Institute Course Offerings

HCCS 100 - *Intro to Computers*
15 hours – 1 credit
This course introduces the student to the basics of computer science, with an emphasis on developing proficiency performing essential computer tasks.

HCMT 100 - *Medical Terminology*
15 hours – 1 credit
This course focuses on analyzing and combining prefixes, rootwords, and suffixes, to spell, use and pronounce medical terminology correctly. Medical abbreviations are included.

HCLP 112 - *Introduction to Health Care*
95 hours (45 class and 50 clinical) – 2 credits
This course introduces the student to those health care issues and processes that affect patients in all settings and are universal to all health care providers. Topics include: man, health, society, health care, therapeutic communication and interpersonal skills, cultural and ethnic diversity, legal issues, health and disease, infection control, cardiopulmonary resuscitation and emergency responses, body mechanics, patient's bill of rights, patient abuse and advocacy, health care delivery models and

settings, the roles of health care providers, practice acts and an introduction to the nursing process. Selected lab and clinical experiences will reinforce course content.

HCLP 114 - *Care of the Geriatric Patient*
160 hours (80 class and 80 clinical) – 4 credits
Basic nursing skills are presented with an emphasis on applying concepts and principles of nursing care for the geriatric client in a variety of settings. Topics include: vital signs, measuring and recording height and weight, care of the environment, abnormal changes in body functioning, personal hygiene, assisting with diet and fluid intake, skin care, patient positioning and transfers, awareness of development tasks of this age group, preserving the patient's dignity, care of cognitively impaired residents (understanding care required, communication, unique needs), and basic restorative techniques (range of motion, turning and position, bowel and bladder training, prosthetic and orthotic devices, wound care).

HCLP 116 - *Practical Nursing and the Nursing Process*
120 hours (70 class and 50 clinical) – 3 credits
This course includes basic and advanced nursing skills required for the application of the nursing process. Topics include: vocational aspects of practical nursing, a study of the purpose and components of the nursing process as a method of individualizing patient care, development and implementation of the plan of care, charting, recording and reporting, physical assessment and medication administration.

HCLP 126 - *Medical Surgical Nursing I*
265 hours (80 hours theory and 185 hours clinical) – 6 credits
This course utilizes concurrent theory and clinical with application of the nursing process in the care of patients with alterations in cardiovascular, respiratory, gastrointestinal, endocrine systems and fluid and electrolyte balance. Concepts of perioperative nursing are introduced and the student provides care to both the preoperative and postoperative patient in the clinical setting. Dosage calculation and medication administration are incorporated into theory and clinical practice. Special needs and care of the Geriatric patient are integrated throughout. Basic and advanced nursing skills are performed in the clinical sites under the direct supervision of the instructor following successful skills check in Lab.

HCLP 124 - *Pharmacology*
70 hours – 2 credits
This course introduces the student to the study of drugs and their action on living organisms. Drug effects interactions and reactions are discussed so that the student obtains a sound knowledge for the safe monitoring of patients receiving drug therapy. Emphasis is placed on specific drug classes including Anti-infectives, analgesics, and drugs that affect the respiratory, cardiovascular, endocrine and gastrointestinal systems. An overview is given of general principles used by the

nurse to administer drugs safely. Simulated drug administration by various routes is practiced in the Nursing Skill Lab prior to guided drug administration in the clinical setting. The laws governing the manufacture, distribution and sale of drugs and the role of the LPN in drug administration is discussed.

HCLP 128 - *IV Therapy*
(15 hours theory, 15 hours clinical 15 hours) - 1 credit

This course includes legal implications of IV Therapy, equipment devices used, anatomy/physiology, methods and techniques, infection control measures, complications, and other vital information related to intravenous therapy. Supervised lab and clinical performance are included.

HCLP 132 - *Medical Surgical Nursing II*
(80 hours theory, 185 hours clinical) - 5 credits

This course presents essential information related to care of the patients experiencing alterations in neurological/sensory function, neoplasm, the musculoskeletal system, urinary system, sexuality, sexually transmitted diseases and skin integrity with integrated geriatrics and pharmacology. Care of patients across the life span is integrated. Using the nursing process the course is a continuation of basic and advanced nursing skills performed in the care of these patients. Team concept, with increasing responsibility with groups of patients, and the role of the LPN, are emphasized as a vital part of this course.

HCLP 134 - *Mental and Behavioral Health*
(20 hours theory, 40 hours clinical) - 2 credits

The focus of this course is on the patient experiencing psychopathological, emotional, and behavioral alterations. Utilizing the nursing process approach students will perform nursing skills in mental health clinical sites under the direct supervision of the nursing instructor. Previous program content on interaction of biological and social conditions that influence the mind and behavior and communication skills will be emphasized. Students will intergrate these concepts in the care of the medical/sychiatric patient in the impatient setting.

HCLP 140 - *Maternal - Newborn Nursing*
(40 hours theory, 40 hours clinical) - 2 credits

Concurrent theory and clinical course explores historical and current issues, trends, growth and development of the childbearing family, fetal development and gestation. Care of the patient during antepartal, intrapartal, and postpartum periods is included as well as care of the neonate in a variety of clinical settings.

HCLP 142 - *Pediatric Nursing*
(40 hours theory 40 hours, 40 hours clinical) - 2 credits

This course presents essential information related to growth and development of infants and children, and those real or potential health threats common but not exclusive to the age groups. Using the nursing process, basic and advanced nursing skills are performed in meeting the needs of the pediatric patient in clinical sites under the direct supervision of the instructor.

HCLP 144 - *Nursing Transitions*
(70 hours theory, 128 hours clinical 128 Hours) - 7 credits

Using the nursing process, this course is a continuation of basic and advanced nursing skills performed in the care of patients with multiple medical surgical diagnoses in a variety of clinical settings. As the final nursing course prior to program completion, the course is intended to assist students in making immediate and future decisions concerning job choices and education growth. Students will be allowed to choose clinical rotation sites of interest from a list of selected clinical sites in the medical and surgical area.

HCMA 009 - *Computation Skills for Healthcare Providers*
1 credit

This is a fast paced review of basic computational skills in arithmetic. Topics include operations in decimals, fractions, whole and mixed numbers. This course is designed to help students prepare for college placement exams and to refresh students who have not been in the academic environment before. Grading will be satisfactory/unsatisfactory.

HCMA 010 - *Algebra Review for Health care Providers*
1 credit

This is a fast paced review of elementary algebra. Topics include computations with signed numbers, scientific notation, polynomial, exponents, factoring and systems equations. This course is designed to help students prepare for college placement exams and to refresh students who have not been in the academic environment before. Grading will be satisfactory/unsatisfactory.