HEALTH (AHS)

AHS 120 - LIFE SCIENCE BIOLOGY
This course provides a general overview of biology in relation to health concepts at the performance level of human activities. Students will study the concepts of homeostasis, cell repair, body rhythms, pain, pharmacology, sleeping, healing, epidemiology and dying. In addition, it prepares students to better understand how human activities effect different body systems such as moving to the skeletal and muscular systems; transporting to the blood, lymphatic and cardiovascular system; breathing to the respiratory system and eliminating to the renal system. This course includes a laboratory component.
Credits: 3

AHS 121 - FOUNDATIONS BODY OF SYSTEMS
This course will study the general anatomy of the human body from a systematic approach. Students will gain an understanding of anatomical terminology, gross structures, and locations of different body structures. Cells, tissues and organs of the integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary and reproductive systems are emphasized. This course includes a laboratory component.
Credits: 3

AHS 130 - HUMAN ANATOMY &PHYSIOLOGY I
This course for Nursing majors focuses on the fundamental principles of the structure, function and organization of the human body through the study of several major body systems including body orientation, cells and tissues, the integumentary, skeletal and cardiovascular, respiratory, digestive and urinary systems. Critical thinking based on the academic subject matter is emphasized. Medical terminology and pathophysiology for the systems are presented. This course includes a laboratory component.
Credits: 3

AHS 131 - HUMAN ANATOMY &PHYSIOLOGY II
This course for Nursing majors focuses on the fundamental principles of the structure, function and organization of the human body through the study of several major body systems including the reproductive, lymphatic, immune and endocrine muscular, nervous and special senses systems. Human development is discussed. Critical thinking based on the academic subject matter is emphasized. Medical terminology and pathophysiology for the systems are presented. This course includes a laboratory component. (Prerequisite: SCI 130)
Credits: 3
Prerequisites: AHS 130

AHS 133 - CHEMISTRY FOR HEALTH SCIENCES
This course covers fundamental principles and laws of chemistry. Emphasis is placed upon the understanding of basic chemical processes, measurement, the states of matter, energy, the atom, molecules, chemical bonds and reactions, chemical equilibria and reaction rates. The student will explore the characteristics of gases, liquids, solids, acids, bases, solutions and colloids. Upon completion, students will be able to demonstrate an understanding of fundamental chemical laws and concepts. This course includes a laboratory component.
Credits: 3

AHS 134 - LIFE SCIENCE BIOLOGY
This course provides a general overview of biology in relation to health concepts at the performance level of human activities. Students will study the concepts of homeostasis, cell repair, body rhythms, pain, pharmacology, sleeping, healing, epidemiology and dying. In addition, it prepares students to better understand how human activities effect different body systems such as moving to the skeletal and muscular systems; transporting to the blood, lymphatic and cardiovascular system; breathing to the respiratory system and eliminating to the renal system. This course includes a laboratory component.
Credits: 3

AHS 140 - BIOLOGICAL SCIENCE
This is an introductory biology course. The basic characteristics of life are examined with emphasis on the role of evolution in creating the diversity of life on earth. Genetic principles and the molecular basis of genetic disease are explored. Human sexual reproduction and modern reproductive technologies are examined. Ethical questions created by biotechnological advances are discussed. This course includes a laboratory component.
Credits: 3

AHS 154 - MICROBIOLOGY FOR HEALTHCARE PR
This microbiology course examines the relationship of control microbiological procedures. Surgical wound classification, stages of wound healing and factors influencing wound healing are studied. The processes of microbiological life are analyzed, as are diseases caused by microbes. This course includes a laboratory component.
Credits: 3

AHS 191 - PHARMACOLOGY FOR NURSING
This course provides an introduction to the study and application of pharmacological principles, the classification of drugs, principles and practices of drug administration, mathematical systems and conversions, and professional responsibilities of the Registered Nurse in drug administration. Students will be introduced to commonly-prescribed psychotherapeutic, central nervous system stimulants and depressants, cardiac, circulatory, diuretic, fluids and electrolytes, and hormonal drugs. Consumer safety, drug relations and poison will also be reviewed. A laboratory component is incorporated into this course. (Prerequisite: MAT 170)
Credits: 3
Prerequisites: MATH 170

AHS 225 - PHLEBOTOMY CERT
Students are introduced to the role of a phlebotomist and their vital membership with the clinical laboratory team. Experience is acquired in obtaining patients' blood specimens. Students must complete and document a minimum of 30 successful venipunctures and 10 successful capillary sticks. The National Healthcare Association (NHA) certification exam (CPT) is offered to qualified candidates. (Prerequisites: A&P, CNHS student enrollment)
Credits: 3
Prerequisites: SCI 128

AHS 230 - CADAVER ANATOMY &PHYSIOLOGY
Presents pro-sections of the human body in a regional manner in the cadaver laboratory. All structures of a specific area are examined and discussed. These regions include skin, muscles, bones, nerves, vessels, organs, and other special features. Allows students to expand their anatomical and physiological knowledge base, professional growth, and public speaking skills. Body systems will also be incorporated including cardiovascular, musculoskeletal, respiratory, digestive, urinary, nervous and reproductive systems. Critical thinking is emphasized. Medical terminology and pathophysiology for systems are presented.
Credits: 3
Prerequisites: AHS 120
Course Notes: Nursing students only who have previously completed anatomy and physiology courses without human cadaver laboratory.

AHS 233 - ORGANIC BIOCHEMISTRY
This course presents the fundamentals of organic chemistry with emphasis in the sources, structure, and functional groups of organic compounds. Topics discussed include alkanes; alkenes; Alkynes; Benzene and its derivatives, alcohols; ethers; thiols; amines; aldehydes; and ketones. Biosynthetic pathways of carbohydrates, fatty acids, membrane lipids and amino acids are introduced.
Credits: 3
Prerequisites: AHS 133 (may be taken concurrently)

AHS 245 - EKG TECHN CERT
Students will learn the principles of electrocardiography including resting EKG, ambulatory monitoring, and stress testing. The student will review the anatomy and physiology of the heart, as well as learning the parts of the EKG complex. Recognition of rhythms and abnormal complexes will be emphasized. Students will perform resting EKG, ambulatory (Holter) monitoring, and stress testing. Upon completion of the course, the student will be eligible to take the EKG Technician Certification Examination. (Prerequisites: A&P, CNHS student enrollment)
Credits: 3
Prerequisites: SCI 128 or SCI 132

AHS 260 - CLINICAL NUTRITION
A review of human nutrition science and fundamentals including individual nutrient needs, food choices, prevention of chronic disease, medical nutrition therapy and nutrition-related public health.
Credits: 3

AHS 280 - CLINICAL PATHOPHYSIOLOGY
This course focuses on the pathophysiology process of disease altercation, its etiology, clinical manifestations, diagnosis, prognosis, risk factors, and the principles of pathology underlying illness and injury to therapeutic nursing interventions and outcomes. Content builds on basic anatomy and physiology, microbiology, and chemistry content.
Credits: 3
Prerequisites: AHS 130 and AHS 131

AHS 300 - GLOBAL HEALTH
This course will examine today's most critical global health issues and trends. Examination will be given to the socioeconomic, biological and environmental causes and consequences of diseases. Some of the topics covered will include: infectious diseases, nutrition, maternal health, non-communicable diseases, mental health and injuries.
Credits: 3

AHS 305 - CONCEPTS OF HEALTH AND DISEASE
This course provides an introduction to fundamental concepts of health and disease, with a focus on the biological, environmental, and social determinants of health. Students will explore the mechanisms of disease, including infection, genetics, and chronic conditions, as well as the body's response to illness. Topics include health promotion, disease prevention, epidemiology, and the impact of lifestyle and healthcare systems on health outcomes.
Credits: 3
Prerequisites: ALH 119 and BIOL 124

AHS 315 - NUTRITION ASSESSMENT
This course will provide an overview of the common nutrition and food security assessment tools. Using practical application, students learn to select and apply these concepts in the nutritional care of clients in clinical, community, and research settings. Additionally, issues of validity and reliability of these methods will be addressed.
Credits: 3
Prerequisites: FIT 235

AHS 325 - COACHING &MOTIV
A variety of areas will be covered for effective coaching that include leadership philosophy, team and staff management, as well as motivational techniques. Students will learn how to observe, evaluate, and provide proper feedback for all sports levels. Focus will be on the importance of communication and proper sportsmanlike behavior in the sports industry. The University's cadre of coaches will provide applied insight for students to observe theory in actual practice. (Prerequisite: FIT 140 (with CPR/AED/ Bloodborne Pathogens, and First Aid Certification offered through FIT 140)
Credits: 3
Prerequisites: FIT 140

AHS 330 - SCIENCE OF FOOD
This course will discuss concepts related to the chemical, physical, sensory and nutritional properties of food relating to menu planning, food preparation and recipe modification. Information will be reviewed on food constituents, additives, labeling, environmental issues, food regulations and food safety and is intended to provide students general application and understanding as associated with food products and ingredients.
Credits: 3
Prerequisites: FIT 235

AHS 340 - PRINCIPLES OF HEALTH
This course will examine Health and Wellness information we encounter in everyday life by informing students on the science behind Health and Wellness as it relates to topics such as achieving wellness, eating/exercising toward a healthy lifestyle, building healthy relationships, understanding and preventing disease, explaining drug use and abuse, making health choices, and overcoming obstacles. Students are provided with the tools needed to make science-based informed health decisions that promote lifelong wellness for personal gain and for clients.
Credits: 3

AHS 351 - ADVANCED EXERCISE PHYSIOLOGY
This course is designed to provide an overview of the acute and chronic responses to exercise. Attention will be placed upon understanding muscle bioenergetics and metabolism, as well as the cardiopulmonary responses to exercise. Topics to be addressed include exercise testing and training and related environmental concerns. (This is a non-lab based course.)
Credits: 3
Prerequisites: BIOL 123 and BIOL 124

AHS 385 - HEALTH & WELLNESS COACH TRAINING

Health and wellness coach training explores the art and science of health and wellness coaching to produce professionals who work with clients to live healthier lives while also creating positive, life-long change. Students will practice strategies and techniques to promote client centered health behavior changes and promote the practice of implementing a healthier lifestyle. Students may qualify to sit for the ACE Health Coach Certification accredited by the National Commission for Certifying Agencies (NCCA).

Credits: 3

Course Notes: Junior or Senior standing in Exercise, Nutrition and Health Science (ENHS) program with current CPR/AED certification. Students outside of ENHS program need program director permission.

AHS 399 - ADVANCED INTERNSHIP CAPSTONE

The purpose of this advanced internship capstone is to provide a transition from the University to an exercise, nutrition, health, fitness or sport setting. The student will apply theories in the field and demonstrate the application of acquired competencies from the Exercise, Nutrition, and Health Science program. Internship consists of 120 hours in a corporate, clinical, community, fitness, health or sport setting under guidance and supervision. In addition to the internship, students propose a topic for study and approval under the guidance of the supervising faculty member to create a capstone project research paper in relation to the exercise, nutrition, health science and sport field.

Credits: 3

Course Notes: Junior or Senior standing in the ENHS program. Students must have an approved internship prior to enrollment. The program director provides approval. In addition to the 120 hour internship, students will meet with the faculty member each week in-person or remotely to review progress on the research paper. Students will also complete a final presentation of their research paper and two assessment exams.