

# HEALTH (AHS)

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## 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 - ANATOMY & PHYSIOLOGY

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 127 - ANATOMY & BODY SYSTEMS I

This course focuses on the fundamental principles of the structure, function and organization of the human body through the study of word parts; body positions, planes and directions; cells, tissues and membranes; major body systems including skeletal, muscular, integumentary, nervous, the senses, endocrine, blood and cardiovascular. Medical terminology and pathology for systems is covered. The components of human movement are addressed. Critical thinking based on the academic subject matter is developed and enables the incorporation of cognitive knowledge in the performance of psychomotor and affective domains. This course includes a laboratory component. (Prerequisite: AHS 100 or SCI 134 suggested)

Credits: 3

Prerequisites: AHS 100

## AHS 128 - ANATOMY & BODY SYSTEMS II

This course focuses on the fundamental principles of the structure, function and organization of the human body through the study of major body systems including respiratory, lymphatic and immune, gastrointestinal, urinary, and reproductive systems. Medical terminology and pathology for systems is covered. Critical thinking based on the academic subject matter is developed and enables the incorporation of cognitive knowledge in the performance of psychomotor and affective domains. This course includes a laboratory component. (Prerequisite: SCI 127)

Credits: 3

Prerequisites: AHS 127

## 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 151 - 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 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 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. This course includes a laboratory component. (Prerequisite: SCI 133)

Credits: 3

Prerequisites: ALH 133

**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. (Prerequisites: SCI 133, SCI 134)

Credits: 3

Prerequisites: AHS 133 and AHS 134

**AHS 280 - CLINICAL PATHOPHYSIOLOGY**

This course focuses on the pathophysiology process of disease alteration, 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. (Prerequisites: SCI 130, SCI 131)

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 - HEALTH&DISEASE**

This course will introduce students to disease prevention, health promotion, assessment, intervention, pharmacological treatments and technologies involved in a variety of health diseases and disorders. Students will focus on the health problems and interventions throughout the lifespan. Topic areas will include: Alzheimer's disease, asthma, cancers, cardiovascular disease, diabetes, infertility, obesity, and metabolic disorders. (Prerequisite: A&P)

Credits: 3

Prerequisites: SCI 128 or SCI 151 or SCI 132

**AHS 315 - NUTRIT ASSESS**

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. (Prerequisite: SCI 260)

Credits: 3

**AHS 315R - ADV INTERNSHIP**

The purpose of this internship is to provide a transition from the University to a professional health and fitness setting. The student will apply theories in the field and demonstrate the application of acquired competencies in the applied health sciences. Internship consists of 100 hours in a corporate, clinical, community, fitness, health or sport setting under the guidance and supervision of a professional practitioner. (Prerequisite: Senior) Course can be repeated up to 12 hours.

Credits: 3

**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

Credits: 3

**AHS 340 - A WELLNESS WAY OF LIFE**

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 understanding wellness, changing behavior, heart disease, stress, exercise, nutrition, substance abuse, cancer prevention, and weight management. Students will be empowered to utilize information gained to make healthy decisions in order to promote a wellness way of life for personal gain and for clients. Behavior choices will also be reviewed to promote a lifetime of health and wellness

Credits: 3

**AHS 350 - INTRO FORENSICS**

This is an experience-based learning course that will introduce the students to the application of science to the law. Students will cover the fundamental aspects of forensic science and the application of various laboratory methodologies used in a Crime Scene Investigation. Physical and chemical evidence processes will include evidence collection, forensic photography, fingerprint identification, serology and DNA analysis, facial reconstruction, death investigation, and forensic entomology. (Prerequisite: A&P class)

Credits: 3

**AHS 351 - ADVANCED EXERCISE PHYSIOLOGY**

This course will examine metabolic, systemic and hormonal responses to the stress of exercise. The regulation of adaptive changes made during acute and chronic exercise will also be explored. Topics include a systems-based approach to the physiology of the body. Additionally, components of exercise will be addressed. (Prerequisite: SCI 121 & SCI 151)

Credits: 3

Prerequisites: AHS 121 and AHS 151

**AHS 356 - CERTIF EXTERNSHIP**

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Credits: 3

**AHS 360 - HEALTH EDU**

This course will help students to develop effective health education programs for diverse populations. Skills will be developed to identify health needs, plan, implement, and evaluate health education programs. Students will be able to plan and design a health promotion program in an area and population of their choice

Credits: 3

**AHS 375 - FOOD RESEARCH & ANALYSIS**

This course will provide information 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. Lab techniques, instrumentation and analysis will be discussed and performed.

Credits: 3

**AHS 380 - FOOD EXPERIENCE**

Practical food experience related to the procurement, preparation and delivery of food in a restaurant setting. Additional concepts discussed include nutritional properties of food in menu planning, food preparation and recipe modification. (Prerequisite: CUL 110)

Credits: 3

Prerequisites: CUL 110

**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

**AHS 390 - EXERCISE, NUTRITION & HEALTH SCIENCE: SENIOR CAPSTONE**

Students will create a capstone project that includes options for research and personal reflection in relation to the exercise, nutrition, health science and sport field. Students will propose a topic for study and approval under the guidance of the supervising faculty member. (Prerequisite: Senior standing)

Credits: 3

**AHS 399 - EXERCISE & SPORT ADVANCED INTE**

The purpose of this internship is to provide a transition from the University to a professional health and fitness setting. The student will apply theories in the field and demonstrate the application of acquired competencies in the applied health sciences. Internship consists of 100 hours in a corporate, clinical, community, fitness, health or sport setting under the guidance and supervision of a professional practitioner. (Prerequisite: Senior) Course can be repeated up to 12 hours.

Credits: 3