Course Descriptions for Athletic Training

HPER 100. Concepts of Fitness & Wellness. 2 Credits

A course designed for students of all ages that teaches the facts about exercise and physical fitness. This general education course combines lecture about the theory of exercise and health issues with laboratory, activity, and technology experiences to introduce the student to concepts of holistic living.

HPER 109. Exercise Techniques and Program Design. 3 Credits

An introductory course that instructs students in the safety and proper mechanics of weight training. Students will acquire knowledge as to the developments of specific resistance training protocols. This course also focuses on the design and application of programs for aerobic and anaerobic training.

HPER 124. Clinical Experience I. 3 Credits

This course will provide classroom and clinical Athletic Training experience under the supervision and guidance of a program approved health care provider. Skills include: emergency care, taping and bracing techniques, and initial exposure to the role and skills of a Certified Athletic Trainer. Fall.

HPER 126. Applications for Taping, Protective Devices, and Equipment. 3 Credits

An introductory course that offers principles and techniques in regard to athletic protective equipment, taping and bracing in the Sports Medicine field. The athletic training student will become proficient in design, construction, maintenance and reconditioning of protective equipment: as well as splinting and taping applications and procedures according to regulations. Spring.

HPER 127. Introduction to Athletic Training. 3 Credits

An introductory preview into the occupation of Athletic Training and the understanding of Athletic Training history, the role and function of the NATA, BOC, CAATE, and state regulatory boards. Spring.

HPER 209. Sport Nutrition Concepts. 3 Credits

An introductory course that examines the principles of Nutrition as specifically related to sports participants. Students will acquire the knowledge necessary to apply sound nutritional practices in the athletic population.

HPER 211. Emergency Response Management. 3 Credits

An advanced course that examines and evaluates current First Aid/CPR/AED skills for the Emergency Medical Responder maintained by the American Red Cross. The student will become proficient in the evaluation and immediate management of acute injuries and illnesses and become certified as an Emergency Medical Responder upon successful completion of the course. Fall.
HPER 224. Clinical Experience II. 3 Credits

This course will provide classroom and clinical Athletic Training experience under the supervision and guidance of a program approved health care provider. Content includes: anatomy and physiology, injury recognition and evaluation, and psychology as related to Athletic Training. Spring.

HPER 226. Injury Recognition and Evaluation of the Lower Extremity. 3 Credits

An in-depth course that examines the lower extremity of the human body using clinical assessment techniques. Orthopedic evaluation and injury recognition will concentrate in the areas of musculoskeletal and neurological conditions of the foot, ankle, lower leg, knee complex, hip and pelvis. Fall.

HPER 227. Injury Recognitions and Evaluation of the Upper Extremity. 3 Credits

An in-depth course that examines the human body using orthopedic clinical assessment techniques. Orthopedic evaluations and injury recognition will concentrate in the areas of musculoskeletal and neurological conditions of the hand, wrist, elbow and shoulder complex. Spring.

HPER 258/259. Applied Anatomy, Physiology & Human Performance. 3 Credits Each

A course designed to be an integrated learning experience in understanding the structure and function of the human body and its application to human movement. HPER 258 and 259 will not satisfy the hours required for the pre-professional students planning to enter the field of science or elementary education majors. 258 Fall; 259 Spring.

HPER 324. Clinical Experience III. 3 Credits

This course will provide classroom and clinical Athletic Training experience under the supervision and guidance of a program approved health care provider. Content includes: psychosocial aspects of sport and injury recognition and evaluation. Fall.

HPER 326. Therapeutic Modalities. 3 Credits

An advanced course that details the body’s response to the following: thermal-agents, electrical-agents, ultrasound and mechanical modalities. Spring.

HPER 328. Therapeutic Exercise. 3 Credits

An advanced course in the analysis and application of therapeutic rehabilitation using an evidence-based approach. Fall.

HPER 331. Injury Recognition and Evaluation of Head, Neck, and Spine. 3 Credits

An in-depth course that examines the human body using orthopedic clinical assessment techniques. Orthopedic evaluations and injury recognition will concentrate in the areas of musculoskeletal and neurological conditions of the head, neck and spine. Fall
**HPER 332. General Medical Conditions.** 3 Credits

An advanced course that provides an overview of general medical conditions pertaining to the athlete and athletic performance. The course offers skills necessary for the use of Medical Evaluation Techniques and equipment, understanding of pharmacology, infectious diseases, dermatological conditions, musculoskeletal, neurological, respiratory, cardiovascular, gastrointestinal, systemic, genitourinary and gynecological disorders. Fall.

**HPER 384. Fitness Assessment and Prescription.** 3 Credits

An exploration of fitness evaluation and exercise prescription. The course investigates activities that promote cardiovascular endurance, flexibility, resistance training, and anaerobic fitness. Students must have a basic knowledge of Exercise Physiology before taking the course. Prerequisite: HPER 258. Spring

**HPER 424. Clinical Experiences IV.** 3 Credits

This course will provide classroom and clinical Athletic Training experience under the supervision and guidance of a program approved health care provider. Content includes general medical conditions, therapeutic exercise, and injury recognition and evaluation. Spring

**HPER 426. Clinical Experience V.** 3 Credits

This course offers clinical athletic training experience under the supervision and guidance of a program-approved health care provider in an approved setting. Course meets periodically for formal competency development and will receive supervised clinical education experience in a variety of clinical education settings. Clinical experience settings may include VCSU, local high school, local junior high school, sports medicine facilities, and other colleges and universities. Fall.

**HPER 438. Organization and Administration for Athletic Training.** 3 Credits

An advanced course, which develops skills in the Organization and Administration in Athletic Training. This course gives the student an understanding of risk management, healthcare delivery mechanisms, insurance, reimbursement, documentation, patient privacy, and facility management. Students will acquire the knowledge necessary to maintain a functional and qualified athletic training room according to national and state standards. Spring.

**HPER 444. Exercise Physiology of Peak Performances.** 3 Credits

An advanced course that focuses on the role of Exercise Physiology in the training and conditioning of sports participants of all ages and activity levels. Students will acquire knowledge in regard to the benefits of exercise as a therapeutic agent in the rehabilitation of injury and disease, and its use to improve quality of life. Prerequisite HPER 390. Fall, Even Years.
**HPER 454. Evidenced-Based Practice.** 3 Credits

A dynamic course intended to expand students’ ability to appropriately use research literature to guide clinical decision making and practice. Current issues, trends and research in the athletic training profession will be examined along with the fundamentals of resume writing and the interview process. Fall.

**HPER 487. Field Experience/Practicum.** 2-4 Credits

An opportunity for the student to gain practical knowledge in the area of Sport and Wellness Studies - Option B and C - for the Exercise Science & Leisure Studies non-teaching degree. The student is required to complete 40 hours of work per hour of credit. Fall, Spring, Summer.

**BIOL 150. General Biology.** 4 Credits

A two-semester sequenced study of the fundamental concepts of Biology through lecture and laboratory work. BIOL 150 is focused on cellular Biology and physiology. Fall

**BIOL 220. Human Anatomy & Physiology I.** 4 Credits

A study of the structures and functions of the human body. The lab work includes physiological exercises, cat dissection with comparison to human structures and computer simulations. Topics include cells and tissues and the skin, bone, muscle, circulatory and the respiratory system. Prerequisites: BIOL 111 or 150 or 151. Fall.

**BIOL 221. Human Anatomy & Physiology II.** 4 Credits

A study of the structures and functions of the human body. The lab work includes physiological exercises, cat dissection with comparison to human structures and computer simulations. Topics include nerve system and the brain, senses and special senses and the endocrine, immune, reproductive, urinary and digestive systems. This course is designed to fulfill the anatomy and physiology requirements for psychology majors. Prerequisites: BIOL 111 or 150 or 151. Spring.

**BIOL 171. Medical Terminology (VCSU).** 3 Credits

An introduction into medical terminology. Topics includes prefixes, suffixes and root words, their meaning, spelling and pronunciation and the use of term in medical documentation. Emphasis is on building a working medical vocabulary based on body systems and diseases.

**AH 171. Medical Terminology (DCB).** 3 Credits

Study of prefixes, suffixes, and root words of medical terms. Emphasis on building a working medical vocabulary based on body systems by studying the meaning,
pronunciation and spelling of medical terms. The anatomy and physiology of each body system is included in this course.

**TECH 161. Technology, Engineering, & Design. 4 Credits**

An introductory course that examines the engineering design process and its use to solve technological challenges. The course covers the nature of technology, technology systems, and the history, evolution, and characteristics of technology, as well as learning activities to apply technology, science, and mathematics concepts.