

ATHLETIC TRAINING CORE COURSE DESCRIPTIONS

1223. Human Anatomy and Physiology I (4 s.h. with Lab)

This course is the first of a two-course sequence dealing with the anatomical and functional relationships of the human body. Emphasis is placed on systems integration leading to an understanding of the functions of the human organism. KIN 1223 covers basic structure and function of the body (cells and tissues, organs, systems) through detailed investigations of the skeletal, muscular, and nervous systems.

1224. Human Anatomy and Physiology II (4 s.h. with Lab)

Prerequisite: Kinesiology 1223 (C- or better).

This course is the second in a two-course sequence dealing with the anatomical and functional relationships of the human body. Emphasis is placed on systems integration leading to an understanding of the functions of the human organism through detailed investigations of the endocrine, circulatory, digestive, urinary, and reproductive systems.

1442. Basic Techniques in Athletic Training (2 s.h.)

Prerequisite: Kinesiology 1223 or permission of the UG Athletic Training Program Coordinator.

Co-Requisite: Kinesiology 1444.

This course introduces students to basic taping and wrapping techniques that are commonly used in the prevention of joint injury in the athletic training profession. Students will obtain both didactic information and practical application of basic taping and wrapping techniques, splinting and ambulatory devices, as well as the guidelines for fitting protective equipment.

1444. Movement Injuries: Care and Prevention (3 s.h.)

Prerequisite: Kinesiology 1223.

This lecture course introduces students to the care and prevention of movement injuries. The content includes a review of pertinent anatomical structures and their relationship to injuries. The course also covers mechanisms, extrinsic and intrinsic factors, as well as basic preventative and treatment measures for common sports-related injuries. Lastly, an overview of legal issues related to sports health care is also discussed.

2421. Emergency Medical Care for Health Professionals (3 s.h.)

This course will provide an introduction to emergency care procedures for the health professional. Students will have the opportunity to learn about and demonstrate the skills necessary to manage acute injuries and illnesses. This will include surveying the scene, conducting initial assessments, utilizing universal precautions, activating an emergency action plan, implementing appropriate emergency techniques and procedures, conducting a secondary assessment and implementing appropriate first aid techniques and procedures for non-life-threatening situations.

2431. Pharmacology and Medical Documentation for Athletic Trainers (3 s.h.)

Prerequisite: Kinesiology 1223, 1442, and 1444.

This course is designed to introduce students to the basic principles of Pharmacology and introduce them to terminology, note writing, and documentation techniques utilized in athletic training practice.

2441. Lower Extremities: Assessment and Treatment of Injuries (3 s.h.)

Prerequisite: Kinesiology 1444.

The first of three courses dealing with evaluation and recognition of injuries specific to physically active populations. This course focuses on injuries to the lower extremities.

Note: A field experience in athletic training is required.

2442. Upper Extremities: Assessment and Treatment of Injuries (3 s.h.)

Prerequisite: Kinesiology 2441 and Kinesiology 3202 or Co-Requisite: Kinesiology 3202.

The second of three courses dealing with evaluation and recognition of injuries specific to physically active populations. This course focuses on injuries to the upper extremities.

Note: A field experience in athletic training is required.

3202. Biomechanics of Human Performance (4 s.h.)

Prerequisite: Kinesiology 1223.

This course focuses on the anatomical and functional relationships among the skeletal and muscular systems and the basic mechanical principles involved in physical activity.

3443. Head, Neck, and Spine: Assessment and Treatment of Injuries (3 s.h.)

Prerequisite: Kinesiology 2442.

The third of three courses dealing with evaluation and recognition of injuries specific to physically active populations. This course focuses on injuries to the head, neck, and spine.

3441. Therapeutic Modalities in Athletic Training (4 s.h.)

Prerequisite: Kinesiology 1444 or permission of instructor.

Co-Requisite: Kinesiology 2441.

This course provides baseline knowledge regarding the indications, principles of application, and clinical decision making for thermal, electrical, and mechanical agents used in the management of athletic injuries.

3442. Therapeutic Exercises in Athletic Training (4 s.h.)

Prerequisite: Kinesiology 1444 and or permission of instructor.

Co-Requisite: Kinesiology 2442.

This course introduces the concepts and principles of a comprehensive rehabilitation program for managing athletic injuries.

3444. General Medical Conditions in Athletic Training (3 s.h.)

Prerequisite: Kinesiology 3443 or permission of instructor.

This course examines current issues in athletic training and sports medicine not previously presented in the undergraduate athletic training curriculum to include conditions of the thorax and abdomen, and systemic diseases.

3487-3687. Practicum in Athletic Training I and II (3 s.h. each)

Prerequisite: Kinesiology 2442.

This course accompanies the first and second clinical experiences of the athletic training curriculum in order to further develop the skills and knowledge necessary for NATA certification examination. Students will review and demonstrate lower extremity evaluations as well as discuss current injuries and practices of their clinical experiences. Isokinetic evaluation, its interpretation and incorporation into clinical practice will also be discussed.

4311. Physiology of Exercise (3 s.h.)

Prerequisite: Kinesiology 2203.

This course examines the interactive mechanisms of regulation of the metabolic, cardiovascular, pulmonary, and muscular/skeletal systems in response to an acute bout of exercise and as chronic adaptation to various types of exercise training regimens. Training principles for human performance and health/fitness promotion are derived based on these interactive physiological mechanisms and responses

4314. Neuromuscular Principles in Strength and Conditioning (4 s.h.)

Prerequisite: Kinesiology 4311.

The course involves an in-depth study of neuromuscular anatomy and physiology with special attention to the acquisition and expression of muscular strength. The scientific basis of muscle performance will be thoroughly investigated. Contemporary training theories for the modification of strength, endurance, speed and power of human skeletal muscle will be reviewed and the results applied to special populations across the movement spectrum. This course is designed to help students integrate and synthesize a large body of knowledge in regard to the role of strength in people's lives and how to best construct exercise-training programs whose outcomes aim to improve neuromuscular function. Via the laboratory component of this course, the students will develop expertise in exercise testing of muscular performance and exercise programming for optimal strength, endurance, speed and power. This course is predicated upon guidelines established by the National Strength and Conditioning Association (NSCA).

4443. Organization and Administration in Athletic Training (3 s.h.)

Prerequisite: Kinesiology 3443.

This course focuses on all administrative aspects of the athletic training profession and includes, but is not limited to, risk management, budget development, policies and procedures as well as identifying facility hazards. This course will also cover contemporary guidelines of the prescreening and physical examination of athletes in addition to record keeping policies, injury, and progress documentation. Lastly, students will learn to develop a safe and efficient athletic training facility incorporating federal and state guidelines.

4450. Special Topics in Athletic Training (3 s.h.)

Prerequisite: Kinesiology 4443 and 3687 or permission of instructor.

This course will provide advanced information about current techniques in orthopaedic surgery, functional rehabilitation, psychosocial intervention, strength and conditioning, and research. Contemporary topics such as pharmacology and nutrition as related to physically active populations will also be discussed. This course will provide opportunities to observe surgical procedures as well as participate in all aspects of current research in athletic training.

4487-4687. Practicum in Athletic Training III and IV (3 s.h. each)

Prerequisite: Kinesiology 3687.

This course is designed to accompany the third and fourth clinical experiences of the athletic training curriculum in order to further develop the skills and knowledge necessary for NATA certification examination. Students will review and demonstrate evaluation, assessment, and rehabilitation of all the major joints in the body, as well as the thorax, ENT, head, and neck. In addition, students will discuss current injuries and rehabilitation practices of their clinical experiences as well as discuss and assess environmental risk factors, equipment fitting and removal.

PH 1104. Nutrition and Health (3 s.h.)

Examines food habits and nutritional needs of young adults. Considers nutritional advertisements, food faddism, fad diets, deficiency diseases, and evaluation of diets.