

## **MASTER OF SCIENCE IN ATHLETIC TRAINING (MSAT)**

### **Course Descriptions**

#### **ATR 4999/ATR 5000 GROSS ANATOMY (5 cr)**

**COURSE DESCRIPTION:** This course is designed to familiarize the student with the clinically relevant aspects of human anatomy via an in-depth examination of anatomical structure and function. In addition to regional gross human anatomy, the course will also cover selected topics in the areas of histology and embryology related to the structures of the selected regions. Emphasis is placed on relationship of structure and normal variants with clinical correlation to pathology and disease presentation. The laboratory component of this course focuses attention on spatial relationships, anatomic variation, and relationship of organ systems. The lecture and lab sections correlate with the ATR 4900/5100 Fundamental Skills in Athletic Training course that runs concurrently.

#### **ATR 4900/ ATR 5100 FUNDAMENTAL SKILLS IN ATHLETIC TRAINING (2 cr)**

**COURSE DESCRIPTION:** This clinical skills lab focuses on fundamental athletic training skills necessary for active participation in the patient care setting. The primary focus is on an introduction to patient history and physical examination, musculoskeletal palpation, pre-participation physical examinations, injury prevention concepts, and documentation. Pre-requisite: BS.EXS.ATR only

#### **ATR 4901/ ATR 5101 FOUNDATIONS OF PROFESSIONAL PRACTICE (1 cr)**

**COURSE DESCRIPTION:** This course provides an introduction to clinical decision making through an exploration of evidence-based practice frameworks, a team approach to healthcare, legal and ethical considerations, primacy of the patient, effective communication and concepts of professionalism and cultural competence. Pre-requisite: BS.EXS.ATR only

#### **ATR 4902/ ATR 5102 PREVENTION AND CARE OF EMERGENCY MEDICAL CONDITIONS (4 cr)**

**COURSE DESCRIPTION:** A lecture, laboratory, and clinical experience that provides a comprehensive approach to the identification of risk factors, preparation of emergency action plans, and recognition and care of emergency medical conditions including those that may lead to sudden death. Prerequisite: Current certification in either American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for Health Care Providers. BS.EXS.ATR only

#### **ATR 4915/ ATR 5215 MUSCULOSKELETAL ASSESSMENT AND DIAGNOSIS I (4 cr)**

**COURSE DESCRIPTION:** This course provides a comprehensive approach to the assessment and diagnosis of lower extremity and low back musculoskeletal injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions. Co-requisites: ATR 4916/5216 Musculoskeletal Assessment and Diagnosis II and ATR 4925/5225 Clinical Skills Lab I. Pre-requisite BS.EXS.ATR only

**ATR 4916/ ATR 5216 MUSCULOSKELETAL ASSESSMENT AND DIAGNOSIS II (4 cr)**

**COURSE DESCRIPTION:** This course provides a comprehensive approach to the assessment and diagnosis of upper extremity, head, neck, and torso musculoskeletal injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions. Co-requisites: ATR 4915/5215 Musculoskeletal Assessment and Diagnosis I and ATR 4925/5225 Clinical Skills Lab I. Pre-requisite BS.EXS.ATR only

**ATR 4925/ ATR 5225 CLINICAL DECISION MAKING I (2 cr)**

**COURSE DESCRIPTION:** This course provides instruction of the standard techniques and procedures for the evaluation and diagnosis of musculoskeletal injuries and common illnesses. Co-requisites ATR 4915/5215 and ATR 4916/5216. Pre-requisite: BS.EXS.ATR only

**ATR 4935/ATR 5235 EVIDENCE BASED PRACTICE I (1 cr)**

**COURSE DESCRIPTION:** This course investigates the concepts of evidence based practice as it relates specifically to musculoskeletal assessment and diagnosis with a primary focus on clinician-and patient-oriented outcome measures and appropriate referral decisions. Students will explore primary literature focused on clinical questions related to a comprehensive approach to injury evaluation. Pre-requisite: BS.EXS.ATR only

**ATR 4945/ ATR 5245 ATHLETIC TRAINING CLINICAL EXPERIENCE I (3 cr)**

**COURSE DESCRIPTION:** 300 hours of clinical experience in the athletic training setting. The course is designed to develop competence in the athletic training clinical integrated proficiencies. BS.EXS.ATR only

**ATR 5315 THERAPEUTIC INTERVENTIONS I (4 cr)**

**COURSE DESCRIPTION:** This course explores the concepts of designing therapeutic interventions for patients with physical dysfunctions that stem from inflammation, pain, and limited movement patterns. The primary focus is on the use of therapeutic modalities, pharmacotherapy, and manual therapy techniques. Co-requisites: ATR 5316 Therapeutic Interventions II and ATR 5325 Clinical Skills Lab II

**ATR 5316 THERAPEUTIC INTERVENTIONS II (4 cr)**

**COURSE DESCRIPTION:** This course provides an in-depth exploration of the concepts of designing therapeutic interventions and corrective exercise plans for patients with physical dysfunctions and limitations associated with orthopedic injuries, pathological movement patterns, and post-operative rehabilitation. Co-requisites: ATR 5315 Therapeutic Interventions I and ATR 5325 Clinical Skills Lab II

**ATR 5325 CLINICAL DECISION MAKING II (2 cr)**

**COURSE DESCRIPTION:** Through the use of problem-based learning, case studies and standardized patients this course allows for the assessment of patient status using clinician-and patient-oriented outcome measures. Based on this assessment and with consideration of the stage of healing and goals, students will design and implement comprehensive therapeutic interventions to maximize the patient's participation and health-related quality of life. Co-requisites: ATR 5315 Therapeutic Interventions I and ATR 5316 Therapeutic Interventions II.

**ATR 5335 EVIDENCE BASED PRACTICE II (1 cr)**

**COURSE DESCRIPTION:** This course investigates the concepts of evidence based practice as it relates specifically to therapeutic interventions with a primary focus on clinician-and patient-oriented outcome measures. Students will explore primary literature focused on clinical questions related to the design, implementation, and modification of therapeutic interventions.

**ATR 5345 ATHLETIC TRAINING CLINICAL EXPERIENCE II (3 CR)**

**COURSE DESCRIPTION:** Clinical experience in the athletic training setting. The course is designed to develop competence in the athletic training clinical integrated proficiencies.

**ATR 6101 GENERAL MEDICAL CONDITIONS (3 CR)**

**COURSE DESCRIPTION:** This course explores the physical, mental, and social health problems seen in the physically active individual, emphasizing the recognition of signs, symptoms, and predisposing conditions related to the specific illness or disease and its recommended treatment.

**ATR 6102 PATHOPHYSIOLOGY (3 CR)**

**COURSE DESCRIPTION:** This course provides an in-depth exploration of altered structural and physiological adaptation processes and how they apply to assessment and treatment of disease and injury with an emphasis on conditions encountered in athletic training and health care.

**ATR 6145 ATHLETIC TRAINING CLINICAL EXPERIENCE III (2 CR)**

**COURSE DESCRIPTION:** 200 hours of clinical experience in an athletic training setting. The course is designed to develop competence in the athletic training clinical integrated proficiencies related to orthopedic assessment and rehabilitation in patients across the lifespan.

**ATR 6215 LEADERSHIP & MANAGEMENT IN ATHLETIC TRAINING (3 CR)**

**COURSE DESCRIPTION:** This course focuses on business management principles associated with athletic training clinical practice as well as leadership and professional development.

**ATR 6217 ADVANCED NEUROMUSCULAR CONCEPTS (3 CR)**

**COURSE DESCRIPTION:** This course provides an in-depth exploration and application of the biomechanics and neuromuscular concepts of therapeutic interventions and corrective exercise plans for patients across the lifespan. This course also will include a capstone experience involving the supervision of a comprehensive orthopedic rehabilitation project.

**ATR 6235 EVIDENCE BASED PRACTICE III (2 CR)**

**COURSE DESCRIPTION:** This course synthesizes the concepts of evidence based practice as it relates to clinical practice. Students will collect and analyze actual clinician-and patient-oriented outcomes generated in the context of their own clinical practice in order to improve patient care.

**ATR 6245 ATHLETIC TRAINING CLINICAL EXPERIENCE IV**

**COURSE DESCRIPTION:** 300 hour comprehensive clinical experience in an athletic training setting. The course is designed to facilitate synthesis and the integration of knowledge, skills, and clinical decision-making into actual patient care.

**ATR 6255 – INTERPROFESSIONAL SEMINAR I (1 cr)**

**COURSE DESCRIPTION:** This course is designed to provide students in health care professional programs with introductory knowledge of interprofessional teamwork within an evolving health care system. The purpose of the course is to introduce concepts in interprofessional education to health profession students for collaborative patient, family, and community health care. The philosophical and theoretical foundations of interprofessional health care are explored. Interactive learning experiences provide the opportunity to develop knowledge and understanding of each professions contribution to health care. This is a foundation course for future interprofessional study of evidence-based practice, health promotion, issues of health care delivery, and clinical application of these concepts. The initial focus of this course will be the analysis of peer-reviewed journal articles that have a wide range of interest across medical specialties and health care fields. The course will convene once monthly for a single 2-hour time slot.

**ATR 6315 OPTIMIZING ATHLETIC PERFORMANCE (3 CR)**

**COURSE DESCRIPTION:** This course explores the concepts of assessing, designing, and implementing specialize performance programs to address the health and performance goals of the athletes. The primary focus is on movement instruction, nutrition, energy systems, and program design.

**ATR 6316 CLINICAL TOPICS IN SPORTS MEDICINE (2 cr)**

**COURSE DESCRIPTION:** This course provides a comprehensive approach to advanced orthopedic concepts associated with physically active individuals across the lifespan. The focus will be on surgical techniques, radiological concepts and interpretation, and advanced treatment procedures used in diverse orthopedic settings.

**ATR 6317 SEMINAR IN ATHLETIC TRAINING (1 CR)**

**COURSE DESCRIPTION:** This course serves as a formal review for the national Board of Certification, Inc. examination for certification as an athletic trainer. Students will also discuss current professional issues pertinent to their entrance into the profession as practicing clinicians.

**ATR 6345 ATHLETIC TRAINING CLINICAL EXPERIENCE V (3 CR)**

**COURSE DESCRIPTION:** 300 hour comprehensive clinical experience in an athletic training setting. The course is designed to facilitate synthesis and the integration of knowledge, skills, and clinical decision-making into actual patient care.

**ATR 6355 – INTERPROFESSIONAL SEMINAR II (1 cr)**

**COURSE DESCRIPTION:** This is the second of two courses designed to help the athletic training student understand the roles of various health professions, especially those represented at High Point University. During the course of their careers, athletic trainers will interact with many diverse technicians, therapists and technologists all of whom have important roles to play in the care of patients. The American Medical Association currently recognizes over 80 professions in the health care field. In this course, students will have direct interaction with students and faculty from other health professions. They will examine patient cases and critical health care issues in order to gain an appreciation for the collaborative nature of patient care. The course will convene once monthly for a single 2-hour time slot.