

ATHLETIC TRAINING (ATTR)

ATTR 101 Principles of Athletic Training (3 credits)

Restriction(s): Athletic Training majors only. The first course in the Bachelor of Science in Athletic Training. Students in this course will learn introductory theory and skills in the prevention, recognition and care of athletic injuries. In addition, the course will introduce students to concepts in emergency planning, research and writing in the field of athletic training and basic skills in injury care and patient transfer.

ATTR 311 Therapeutic Modalities in Athletic Training (3 credits)

Prerequisite(s): ATTR 211, ATTR 252. Restriction(s): Athletic Training majors only. This class is a study involving the design, theory and application of athletic injuries. Upon successful completion of the class, the student should be able to properly select and properly apply modalities commonly found in the training room as part of a comprehensive program of athletic injury care and rehabilitation.

ATTR 312 Therapeutic Exercise in Athletic Training (3 credits)

Corequisite(s): ATTR 352. Prerequisite(s): ATTR 211, ATTR 212, ATTR 311. Restriction(s): Athletic Training majors only. This class is a study involving the theory and application of rehabilitative exercise to individuals with athletic injuries. This includes preparation for return to play. Upon successful completion of the class, the student should be able to properly select and properly use therapeutic exercise as part of a comprehensive program of athletic injury care and rehabilitation.

ATTR 351 Clinical Education in Athletic Training III (3 credits)

Corequisite(s): ATTR 212. Prerequisite(s): ATTR 252. Restriction(s): Athletic Training majors only. The third course to provide students in the athletic training education program with supervised clinical education and experience. Students apply techniques and theory learned in athletic training courses with specific emphasis on the use of therapeutic modalities in the sports medicine setting.

ATTR 352 Clinical Education in Athletic Training IV (3 credits)

Corequisite(s): ATTR 312. Prerequisite(s): ATTR 351. Restriction(s): Athletic Training majors only. The fourth course in the professional sequence that provides students in the athletic training education program with instruction in clinical competencies and proficiencies and supervised clinical education and experience. Students apply techniques and theory learned in athletic training courses with specific emphasis on the use of therapeutic modalities in the sports medicine setting.

ATTR 360 Clinical Measurement and Instrumentation in Athletic Training and Exercise Science (3 credits)

Prerequisite(s): ATTR 212 or PEMJ 320. The study of methodology and instrumentation used in the fields of Athletic Training and Exercise Science for the investigation of clinical and research questions, problems and hypotheses. The course will explore topics in clinical evaluation, research and investigation. Students will investigate clinical decision making, development of research questions, investigation of scientific literature, experimental designs, methodology, instrumentation, analysis and interpretation of data and methods of incorporating the results of investigation into clinical practice. Students will also be required to demonstrate clinical application of instrumentation and technology into professional practice. Students will be expected to be actively engaged in application of course concepts under the direction of faculty in the field through laboratory and research based experiences.

ATTR 402 Clinical Anatomy (3 credits)

Prerequisite(s): BIOL 244 and BIOL 245. Restriction(s): BS in Exercise Science, Clinical and Preprofessional and MS in Athletic Training or departmental approval. In this course, students study the connection between human anatomy and the clinical practice of athletic training. Students will identify human anatomical structures through the palpation, review, and functional testing of illustrations, anatomical and human models, and diagnostic images. Students will apply anatomical knowledge to palpation and manual testing of anatomical structures including bony structures, muscles, nerves, joints, and ligaments. Students will learn to identify musculoskeletal conditions from diagnostic images. Students will also apply knowledge of human anatomy and physiology to perform neurocognitive functional tests of the nervous system. Students will apply the use of auscultation techniques to identify various pathological conditions of the human body. Equivalent course ATTR 240 effective through Spring 2022.

ATTR 411 Administration of Athletic Training Programs (3 credits)

Corequisite(s): ATTR 451. Prerequisite(s): ATTR 311, ATTR 312. Restriction(s): Athletic Training majors only. An overview of administrative components of an athletic training program for high school, college, and professional athletic organizations. Topics include financial management, training room management, personnel management, health care services, and pharmacology for athletic trainers. Practical experiences in budget management, facility organization, pharmacological procedures and issues, and a case study approach to issue resolution are included.

ATTR 451 Clinical Education in Athletic Training V (3 credits)

Corequisite(s): ATTR 411. Prerequisite(s): ATTR 352. Restriction(s): Athletic Training majors only. Fifth course to provide students in the athletic training education program with supervised clinical education and experience. Students apply techniques and theory learned in athletic training courses with specific emphasis on the use of therapeutic exercise and rehabilitation in the sports medicine setting. Students will also be required to incorporate theory and clinical skills from other courses in the program in evaluation and treatment decision making.

ATTR 495 Seminar in Athletic Training (3 credits)

Prerequisite(s): ATTR 411. Restriction(s): Athletic Training majors only and senior status. The capstone course for students in the athletic training education program. Students summarize and draw together their didactic and clinical education in preparation for the National Athletic Trainers' Association Board of Certification Examination. Students also explore subjects and current issues germane to the field of athletic training.

ATTR 500 Foundations of Therapeutic Intervention and Critical Incident Management (3 credits)

Restriction(s): Athletic Training majors only. Students will learn knowledge and skills related to risk reduction, wellness, and health literacy in athletic training. The course will introduce the basics of physical and vital signs assessment, evaluation, and diagnosis of specific emergent conditions. Students will learn and apply the latest techniques in critical incident management of emergent and on-the-field conditions in athletic training, as well as the foundations of therapeutic interventions including basic management, taping, and bandaging of health conditions.

ATTR 502 Clinical Anatomy (3 credits)

Restriction(s): MS in Athletic Training students only. In this course, students study the connection between human anatomy and the clinical practice of athletic training. Students will identify human anatomical structures through the palpation, review, and functional testing of illustrations, anatomical and human models, and diagnostic images. Students will apply anatomical knowledge to palpation and manual testing of anatomical structures including bony structures, muscles, nerves, joints, and ligaments. Students will learn to identify musculoskeletal conditions from diagnostic images. Students will also apply knowledge of human anatomy and physiology to perform neurocognitive functional tests of the nervous system. Students will apply the use of auscultation techniques to identify various pathological conditions of the human body.

ATTR 510 Sports Medicine Issues for Athletes in Special Populations (3 credits)

Restriction(s): Admission to the Master of Science in Athletic Training or departmental approval. Students study the impact of selected cognitive, physical, sensory and developmental disabilities on competitive athletic participation and participation in strenuous physical activity. Students learn about the pathophysiology, etiology, body adaptation and accommodation to a variety of physical and cognitive disabilities. They also investigate the effect of the disability culture on injury care in this population. They develop strategies to effectively and sensitively communicate with these athletes regarding injury care and management.

ATTR 530 Risk Reduction, Wellness, and Health Literacy (3 credits)

Prerequisite(s): ATTR 500. Restriction(s): Athletic Training majors only. Students will learn knowledge and skills related to risk reduction, wellness, and health literacy in athletic training. The course will prepare students for the recognition, examination, and vital signs assessment of a wide variety of health conditions. Students will learn about strategies to promote health literacy, optimize wellness and patient outcomes, and risk mitigation.

ATTR 531 Psychosocial Interventions and Health Equity in Athletic Training (3 credits)

Prerequisite(s): ATTR 530. Restriction(s): Athletic Training majors only. Students will learn about strategies and interventions relating to the recognition, identification, and appropriate intervention for psychological, social, emotional and mental behaviors within the scope of practice of the athletic trainer. They will explore the theoretical background of psychological and emotional responses to injury and/or forced inactivity. Students will learn how to action plans for mental health interventions and how to identify the need for referral to appropriate mental health professionals. Students will learn about diversity, equity, and inclusion initiatives to optimize stakeholder and patient benefits and outcomes. Students will discuss the models of social determinants for health, discuss ways to better understand and serve individuals and groups.

ATTR 532 General Health Conditions and Pharmacology in Athletic Training (3 credits)

Prerequisite(s): ATTR 530. Restriction(s): Athletic Training majors only. Students will learn knowledge and skills related to risk reduction, wellness, and health literacy in athletic training. The course will prepare students for the recognition, examination, assessment and referral of infectious and systemic health conditions. Students will learn about strategies to promote health literacy, optimize wellness and patient outcomes, and risk mitigation in various settings. The course content will have an emphasis on the relationship of pharmacological interventions and exercise on physical activity modifications to optimize patient wellness and outcomes.

ATTR 533 Healthcare Administration Professional Responsibility (3 credits)

Prerequisite(s): ATTR 530. Restriction(s): Athletic Training majors only. Students will study a wide range of healthcare administration topics in athletic training including principles of general operations and logistics, outcomes assessments, quality improvement analysis, policy and procedure development and review, and scope of practice limits for athletic trainers. There is an emphasis on the healthcare administration. Students will learn about strategies to promote health literacy, optimize wellness and patient outcomes, and risk mitigation in various settings. The focus for the course will include patient safety, scope of practice, appropriate referral, and legal risks and ramifications.

ATTR 540 Assessment Evaluation and Diagnosis of Health Conditions I (3 credits)

Prerequisite(s): ATTR 500 and ATTR 530 may be taken as prerequisite or corequisite. Restriction(s): Athletic Training majors only. Students will learn about theory and techniques required by Athletic Trainers and sports medicine professionals in the assessment, evaluation, and diagnosis of injuries and conditions in physically active individuals. Emphasis of this course will focus on the lower extremities, thigh, pelvis, lower back, and spine. Application of techniques for the assessment of injuries and health conditions in athletes and physically active individuals will be integrated with laboratory and clinical education experiences.

ATTR 541 Therapeutic Interventions I: Therapeutic Exercise (3 credits)

Prerequisite(s): ATTR 540. Restriction(s): Athletic Training majors only. Students will learn about the theory and application of rehabilitative exercise to individuals with activity related health conditions. This includes preparation for functional progression and return to activity. Upon successful completion of the class, the student should be able to properly select and apply therapeutic exercise as part of a comprehensive program of athletic injury care and rehabilitation.

ATTR 542 Assessment Evaluation and Diagnosis of Health Conditions II (3 credits)

Prerequisite(s): ATTR 540. Restriction(s): Athletic Training majors only. Students will learn about theory and techniques required by Athletic Trainers and sports medicine professionals in the assessment, evaluation, and diagnosis of injuries and conditions in physically active individuals. Emphasis of this course will focus on the thoracic and cervical spine, shoulder girdle, and upper limb. Application of techniques for the assessment of injuries and health conditions in athletes and physically active individuals will be integrated with laboratory and clinical education experiences.

ATTR 543 Therapeutic Intervention II: Therapeutic Modalities (3 credits)

Prerequisite(s): ATTR 541. Restriction(s): Athletic Training majors only. Students in this course will learn how to select and administer therapeutic modalities to individuals with musculoskeletal and neurological conditions. The student will understand the physiological principles by which selected modalities function and the electromagnetic and acoustical theory behind the operation of selected modalities. Students will also understand and demonstrate the assessment of treatment effectiveness and decision-making regarding treatment goals and objectives and select and apply therapeutic modalities to meet those goals.

ATTR 551 Clinical Experience in Athletic Training I (3 credits)

Prerequisite(s): ATTR 500. Restriction(s): MS in Athletic Training. Students in the Athletic Training major will engage in simulated and immersive supervised clinical fieldwork. The course will highlight supervised application of techniques and theory learned in athletic training courses to date with an emphasis on recognition of pathology, history taking, emergent care, taping and bandaging, basic anatomy and physiology, structural kinesiology, and environmental risk management. Preceptors during fieldwork assignments will model professional behaviors consistent with the National Athletic Trainers' Association Code of Ethics and the Board of Certification's Standards for Professional Practice. This is the first course for students to gain experience through the application of entry-level patient care skills during simulation and clinical immersion that address the continuum of care and engagement in inter-professional education.

ATTR 552 Clinical Experience in Athletic Training II (3 credits)

Prerequisite(s): ATTR 540 and ATTR 551. Restriction(s): MS in Athletic Training. Students in the Athletic Training major will engage in simulated and immersive supervised clinical fieldwork. The course will highlight supervised application of techniques and theory learned in athletic training courses to date with an emphasis on conducting a clinical assessment and evaluation, making a differential diagnosis, applying and interpreting special testing, and planning therapeutic interventions for injury management. Preceptors during fieldwork assignments will model professional behaviors consistent with the National Athletic Trainers' Association Code of Ethics and the Board of Certification's Standards for Professional Practice. This is the second course for students to gain experience through the application of entry-level patient care skills during simulation and clinical immersion that address the continuum of care and engagement in inter-professional education.

ATTR 553 Clinical Experience in Athletic Training III (3 credits)

Prerequisite(s): ATTR 541 and ATTR 552. Restriction(s): MS in Athletic Training. Students in the Athletic Training major will engage in simulated and immersive supervised clinical fieldwork. The course will highlight supervised application of techniques and theory learned in athletic training courses to date with an emphasis on non-sports patients, non-orthopedic conditions, management of concussion, continuation of assessment and evaluation, and the planning and implementation of therapeutic interventions. Preceptors during fieldwork assignments will model professional behaviors consistent with the National Athletic Trainers' Association Code of Ethics and the Board of Certification's Standards for Professional Practice. This is the third course for students to gain experience through the application of entry-level patient care skills in simulation and clinical immersion that address the continuum of care and engagement in inter-professional education.

ATTR 554 Clinical Experience in Athletic Training IV (3 credits)

Prerequisite(s): ATTR 553. Restriction(s): MS in Athletic Training. Students in the Athletic Training major will engage in simulated and immersive supervised clinical fieldwork. The course will underscore supervised application of techniques and theory learned in athletic training courses to date with an emphasis on establishing a relationship with a physician, making clinical decisions, psychosocial intervention and referral, preparing for the Board of Certification exam, and searching for a job. Preceptors during fieldwork assignments will model professional behaviors consistent with the National Athletic Trainers' Association Code of Ethics and the Board of Certification's Standards for Professional Practice. This is the last course for students to gain experience through the application of entry-level patient care skills in simulation and clinical immersion that address the continuum of care and engagement in inter-professional education.

ATTR 560 Research Seminar in Evidence-Based Principles and Practices (3 credits)

Prerequisite(s): ATTR 553. Restriction(s): Athletic Training majors only. Students will explore methodologies used in athletic training to study clinical questions and problems. Students will engage in clinical decision-making, development of research questions, methods of reviewing scientific literature, experimental designs, methodology and instrumentation. Students learn about evidence based practice by investigation solutions for clinical problems. Students will develop and complete a capstone project that answers a clinically relevant question or problem. They are actively engaged in application of course concepts in the field through laboratory and research-based experiences.