**AT - Athletic Training**

**ATHLETIC TRAINING Courses**

**AT 602. Foundations of Sports Medicine for Health Care Providers. 3 Credits.**
An overview of tissue response to injury and pain transmission provide the foundation from which students will learn about physical agents and specific conditions from a medical perspective. Pathology for specific injuries will be taught, and students will become familiar with the theoretical and practical application of physical agents as it relates to tissue response to injury and pain control. An introduction to the basic principles and underlying theories relating to examination and treatment techniques will also be presented. Prerequisite: Students must be admitted into the Master of Science in Athletic Training degree program.

**AT 603. Clinical Examination and Patient Care-Spine & Head. 4 Credits.**
This course is designed to provide information relative to the prevention, recognition, evaluation, treatment, rehabilitation, and return to function and/or activity of athletic injuries involving the spine or head. Prerequisite: Students must be admitted into the Master of Science in Athletic Training program.

**AT 604. Clinical Examination and Patient Care-Lower Extremity. 4 Credits.**
This course is designed to provide information relative to the prevention, recognition, evaluation, treatment, rehabilitation, and return to function and/or activity of athletic injuries involving the lower extremity. Prerequisite: Students must be admitted into the Master of Science in Athletic Training program to register for this course.

**AT 605. Clinical Examination and Patient Care-Upper Extremity. 4 Credits.**
This course is designed to provide information relative to the prevention, recognition, evaluation, treatment, rehabilitation, and return to function and/or activity of athletic injuries involving the upper extremity. Prerequisites: Students must be admitted into the Master of Science in Athletic Training program to register for this course.

**AT 607. Management of Medical Conditions for Healthcare Providers I. 3 Credits.**
Instruction and practice in advanced first aid, Emergency Cardiac Care techniques, and oxygen administration for the paramedical professional. A study of the knowledge and skills required to recognize, triage, refer, and treat, as appropriate, internal injuries, general medical conditions, and disabilities of patients involved in physical activity. Prerequisite: Students must be admitted into the Master of Science in Athletic Training program.

**AT 612. Functional Movement for Healthcare Providers. 3 Credits.**
This course is designed to cover the anatomical and mechanical analysis of human musculoskeletal function. Principles of biomechanics, connective tissue behavior, and muscle physiology are integrated with joint structure and function to form the basis of understanding normal and pathological movement. Prerequisite: AT 691.

**AT 615. Research I. 2 Credits.**
This course is designed to introduce the graduate student to research processes in the athletic training field. The focus is on understanding and recognizing principles of evidence-based practice in athletic training, understanding the elements of evidence, appraising the evidence, and considering the evidence for use in clinical practice. Prerequisite: Students must be admitted into the Master of Science in Athletic Training program to register for this course.

**AT 617. Management of Medical Conditions for Healthcare Providers II. 3 Credits.**
Advanced management of acute conditions including wound management, phlebotomy, medication administration, dislocation reduction, and appropriate referral strategies. Advanced therapeutic techniques will also be incorporated. Prerequisite: AT 607.

**AT 618. Current Research in Athletic Training. 1 Credit.**
Designed to provide an understanding of evidence-based practice to the sports medicine setting and the intricacies of performing evidence-based practice research projects.

**AT 623. Athletic Training Practicum I. 1 Credit.**
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

**AT 625. Research II. 1 Credit.**
This course is designed to systematically guide professional athletic training students through the research process. Coursework will focus on development of an original research idea, building the theoretical background, and identifying the rationale for a research project. Based on the nature of this course, students will be required to meet with a research supervisor outside of the time permitted for class. Prerequisites: AT 615.

**AT 626. Advanced Orthopaedic Evaluation and Rehabilitation. 4 Credits.**
This course is designed for sports medicine clinicians and will focus on advanced topics in the study of orthopaedic evaluation, assessment, management, and rehabilitation of common athletic injuries. A combination of discussion, lecture, critical review of literature, laboratory activities, and student presentations will be employed throughout the course.

**AT 628. The Spine: Evaluation and Rehabilitation. 3 Credits.**
A course designed to provide information relative to the recognition, evaluation, and treatment of athletic injuries involving the spine.

**AT 630. Interprofessional Healthcare in Clinical Practice. 3 Credits.**
This clinical experience entails interaction with healthcare providers associated with sports medicine specialties and general medical concerns.

**AT 633. Athletic Training Practicum II. 1 Credit.**
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

**AT 635. Research III. 1 Credit.**
This is a course designed to guide professional athletic training students through aspects of the research process. Coursework will focus on writing the Methods sections for a research manuscript, writing the results section for a research manuscript and proper data entry techniques for a research project. Based on the nature of this course, students will be required to meet with a research supervisor and collect data for their respective project outside of the time permitted for class. Prerequisites: AT 615 and AT 625.

**AT 638. Documentation & Quality Improvement for Healthcare Providers. 3 Credits.**
This course will provide an overview of medical terminology, and best practices in medical documentation will be emphasized. Use of documentation strategies to analyze practice trends to identify and implement quality improvement strategies will be stressed. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

**AT 640. Clinical Medicine for Healthcare Providers I. 3 Credits.**
This course introduces the healthcare student to the normal and abnormal physiology of different body systems as well as differential diagnoses in common medical conditions. Factors associated with those body systems that influence examination and intervention will be discussed. Also discussed is when referral to other practitioners is recommended and required. A case study approach is employed to enforce critical thinking and to mimic practical application. Prerequisites: AT 691.

**AT 641. Clinical Medicine for Healthcare Providers II. 3 Credits.**
This course will address health across the lifespan, as well as highlight strategies to mitigate the risk of long-term health complications. This course will additionally identify and describe various modes of imaging techniques and tests used in medical practice for the neurological, musculoskeletal, cardiovascular, and pulmonary systems. Prerequisites: AT 691 and AT 640.
AT 643. Athletic Training Practicum III. 1 Credit.
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

AT 645. Research IV. 1 Credit.
This course is designed to guide professional athletic training students through aspects of the research process. Coursework will focus on writing the discussion section for a research manuscript, writing a research abstract for submission to a conference, developing an oral research presentation for a conference, and creating a poster presentation for a conference. Based on the nature of this course, students will be required to meet with a research supervisor outside of the time permitted for class. Prerequisites: AT 615, AT 625 and AT 635.

AT 647. Interprofessional Clinical I. 1 Credit.
This clinical experience entails interactions with healthcare providers associated with orthopedic specialties and general medical concerns. Prerequisites: Students must be admitted in the Master of Science of Athletic Training program to register for this course.

AT 648. Interprofessional Clinical II. 1 Credit.
This clinical experience entails interaction with healthcare providers associated with sports medicine specialties and general medical concerns. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 650. Integration of Evidence for Clinical Decision Making in Sports Medicine. 3 Credits.
This course is designed to introduce the graduate student to research processes in the athletic training field. The focus is on understanding and recognizing principles of EBP in athletic training, understanding the elements of evidence, appraising the evidence, and considering the evidence for use in clinical practice.

AT 651. Statistical Techniques for Clinical Decision Making in Sports Medicine. 3 Credits.
This course includes conceptual and computational applications associated with the common statistical techniques relevant to sports medicine clinicians. The intent is to provide students with an introduction to frequently used descriptive and inferential statistical methods for clinical or research purposes in sports medicine. Lectures and laboratory exercises will be utilized to instruct students on using statistics to be intelligent consumers of the research literature. Emphasis will be placed on using statistics to make informed, evidence-based clinical decisions with the goal of enhancing patient care. Prerequisite: AT 650.

AT 652. Pharmacology. 3 Credits.
Introduces principles of drug therapy across the lifespan and their use pertaining to the healthcare of the physically active. An emphasis on the application of knowledge and skills required of the healthcare provider, including indications, contraindications, precautions, interactions, documentation, and governing regulations. Prerequisites: AT 691 or other graduate-level human anatomy course as approved by the instructor.

AT 653. Athletic Training Practicum IV. 1 Credit.
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

AT 655. Teaching Strategies and Assessment. 3 Credits.
This course is designed to provide information related to teaching strategies and techniques along with supervised and mentored teaching experiences within fields applicable to athletic training.

AT 657. Lower Extremity Injury Management Strategies. 3 Credits.
Stresses clinical techniques used in the management and assessment of the lower extremity and spine through utilization of evidence-based practice.

AT 661. Behavioral Health in Sports Medicine. 3 Credits.
The focus of this course is on identification, referral, and coordinated treatment options for patients with mental and behavioral health conditions. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 664. Ethics in Healthcare. 3 Credits.
This course will provide in-depth coverage of legal and ethical concerns for sports medicine healthcare providers. Identification and analysis of applicable local, state, and federal laws and regulations that are specific to the delivery of healthcare. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 666. Athletic Training Practicum I. 1 Credit.
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine. Prerequisite: AT 603.

AT 667. Athletic Training Practicum II. 1 Credit.
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine. Prerequisite: AT 604.

AT 668. Athletic Training Practicum III. 2 Credits.
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

AT 669. Athletic Training Practicum IV. 1 Credit.
This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 670. Athletic Training Research I. 1 Credit.
This course is designed to systematically guide post-professional athletic training students through the research process. Coursework will focus on development of an original research idea, building the theoretical background, and identifying the rationale for a research project. Based on the nature of this course, students will be required to meet with a research supervisor outside of the time permitted for class. Prerequisite: AT 650.

AT 671. Athletic Training Research II. 2 Credits.
This is a course designed to guide post-professional athletic training students through aspects of the research process. Coursework will focus on writing the Methods sections for a research manuscript, writing the results section for a research manuscript and proper data entry techniques for a research project. Based on the nature of this course, students will be required to meet with a research supervisor and collect data for their respective project outside of the time permitted for class. Prerequisites: AT 670.

AT 672. Athletic Training Research III. 3 Credits.
This course is designed to guide post-professional athletic training students through aspects of the research process. Coursework will focus on writing the discussion section for a research manuscript, writing a research abstract for submission to a conference, developing an oral research presentation for a conference, and creating a poster presentation for a conference. Based on the nature of this course, students will be required to meet with a research supervisor outside of the time permitted for class. Prerequisites: AT 671.

AT 673. Healthcare Administration and Policy. 3 Credits.
An overview of administrative and organizational concepts that relate to healthcare entities that provide athletic training services. Facility design, fiscal management, organizational management, and insurance issues will be emphasized. Students will learn about the development and implementation of policies and procedures that occur within an organization that delivers patient care that can impact delivery and quality of care. Pre- or corequisite: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 686. Performance Enhancement in Sports Medicine. 3 Credits.
A study of the principles and techniques utilized in optimizing physical performance and reducing injury through proper and effective strength and conditioning programs. Special emphasis will be placed on current research findings, breakthrough and advanced weight training techniques, and popular conditioning practices. This course will also provide the student with skills in exercise leadership. The student will learn how to lead resistance training, flexibility training, cardiovascular training involving a variety of exercise modes, and group exercise. Prerequisites: AT 612.
AT 687. Contemporary Issues in Athletic Training. 2 Credits.
Seminar-based course that will involve discussion of critical questions and contemporary issues and problems in athletic training/sports medicine. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 689. Professional Competence Assessment in Athletic Training. 3 Credits.
Knowledge and skills for successful pursuit of athletic training credentials, including Board Of Certification (BOC) examination preparation, employment, and continuing professional competence. Will include self-analysis of patient encounter portfolio and identification of clinical needs. Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course.

AT 691. Gross Anatomy for the Rehabilitation Sciences. 6 Credits.
This course will include dissection of a human cadaver and will be supplemented with classroom lectures. The course is designed to teach graduate athletic training students the principles and concepts of human gross anatomy as they apply to clinical practice. Emphasis will be on the musculoskeletal, nervous, and vascular systems of the extremities.

AT 711. Analysis of Human Motion for Sports Medicine Clinicians. 3 Credits.
This course includes theories and applications of techniques concerning the analysis of human motion for the sports medicine clinician. The intent of this course is to provide students with an introduction to quantitative analysis of human motion and the concepts and equipment to collect objective quantifiable data for clinical or research purposes.

AT 756. Education in Athletic Training. 4 Credits.
Designed to introduce current concepts of curriculum development, evaluation methods, course construction and testing as related to the athletic training clinical and didactic experience. Designed to introduce the graduate student to aspects of the management of learning and instruction; how learners learn and how teachers can facilitate their learning as related to the athletic training didactic and clinical experience.

AT 811. Analysis of Human Motion for Sports Medicine Clinicians. 3 Credits.
This course includes theories and applications of techniques concerning the analysis of human motion. It is designed to provide opportunities for the advanced study of motion analysis techniques for the study of human movement. The intent of this course is to provide students with an extensive knowledge concerning quantitative analysis of human motion and the concepts and equipment to collect objective quantifiable data to be used for clinical or research purposes.

AT 998. Master's Graduate Credit. 1 Credit.
This course is a pass/fail course for master's students in their final semester. It may be taken to fulfill the registration requirement necessary for graduation. All master's students are required to be registered for at least one graduate credit hour in the semester of their graduation.