AT - Athletic Training

AT 602 Foundations of Sports Medicine for Health Care Providers (3 Credit Hours)

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. **Prerequisites:** Students must be admitted into the Master of Science in Athletic Training degree program

AT 603 Clinical Examination and Patient Care-Spine & Head (4 Credit Hours)

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.

Prerequisites: Students must be admitted into the Master of Science in Athletic Training program

AT 604 Clinical Examination and Patient Care-Lower Extremity (4 Credit Hours)

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.

Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course

AT 605 Clinical Examination and Patient Care-Upper Extremity (4 Credit Hours)

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 of Athletic Training program to register for this course

AT 607 Management of Medical Conditions for Healthcare Providers I (3 Credit Hours)

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.

Prerequisites: Students must be admitted into the Master of Science in Athletic Training program

AT 612 Functional Movement for Healthcare Providers (3 Credit Hours)

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.

Prerequisites: AT 691

AT 615 Research I (2 Credit Hours)

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.

Prerequisites: Students must be admitted into the Master of Science of Athletic Training program to register for this course

AT 617 Management of Medical Conditions for Healthcare Providers II (3 Credit Hours)

Advanced management of acute conditions including wound management, phlebotomy, medication administration, dislocation reduction, and appropriate referral strategies. Advanced therapeutic techniques will also be incorporated.

Prerequisites: AT 607

AT 618 Current Research in Athletic Training (1 Credit Hour)

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 Hour)

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 Hour)

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 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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 Hour)

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 Hour)

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 Credit Hours)

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 Credit Hours) 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 Credit Hours)

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 Hour)

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 Hour)

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 Hour)

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 Hour)

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 Credit Hours)

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 Credit Hours)

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.

Prerequisites: AT 650

AT 652 Pharmacology (3 Credit Hours)

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 Hour)

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 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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 Hour)

This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

Prerequisites: AT 603

AT 667 Athletic Training Practicum II (1 Credit Hour)

This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

Prerequisites: AT 604

AT 668 Athletic Training Practicum III (2 Credit Hours)

This course is designed to provide practical experience in the athletic training setting and an understanding of evidence-based practice in sports medicine.

Prerequisites: AT 605

AT 669 Athletic Training Practicum IV (1 Credit Hour)

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 Hour)

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. **Prerequisites:** AT 650

AT 671 Athletic Training Research II (2 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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 Credit Hours) 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 Credit Hours)

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 Credit Hours)

This course is designed to provide students in the School of Rehabilitation Sciences an interprofessional education experience that teaches the basic principles and concepts of human gross anatomy so they can apply it to their clinical practice. While multiple body systems will be covered, emphasis will be on the musculoskeletal, articular, nervous, and vascular systems.

AT 697 Independent Study in Athletic Training (3 Credit Hours)

An overview of clinical reasoning strategies and opportunities for clinical practice implementation will be provided. Students are provided a review of both human anatomy and evidence-based strategies for the delivery of care. Students will learn about the development and implementation of policies and procedures that can impact delivery and quality of care.

AT 711 Analysis of Human Motion for Sports Medicine Clinicians (3 Credit Hours)

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 Credit Hours)

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 teacherscan facilitate their learning as related to the athletictraining didactic and clinical experience.

AT 811 Analysis of Human Motion for Sports Medicine Clinicians (3 Credit Hours)

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 Hour)

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.