

ATHLETIC TRAINING (MSAT)

MSAT 501. Manual Based Exam and Treatment. (3 Credits)

This course will familiarize the student with the theory, skills, and clinical applications of various forms of manual soft tissue examination and treatment. The manual therapy techniques that this course will focus on include Graston Technique, muscle energy techniques, joint mobilization, myofascial release techniques, cupping, and Kinesio-tape. All skills will be demonstrated and practiced in a hands-on lab environment.

MSAT 505. Professional Development. (1 Credit)

This course is designed to prepare students in the Master of Science in Athletic Training program for the process of seeking credentialing and employment upon graduation. Students will learn how to prepare a professional cover letter and resume, refine their interview skills, and obtain certification as an athletic trainer. Must be enrolled in MSAT Program or have instructor consent.

MSAT 510. Pathophysiology, Pharmacology, and General Medicine. (4 Credits)

This course is designed to provide the learner with information regarding diseases and conditions addressed in the profession of athletic training. Classroom and laboratory experiences will encompass classroom exercises addressing illness/condition recognition, assessment, differential diagnosis, referral, and treatment of a variety of different patient populations. The course will examine pharmaceutical drug applications, interactions, and their value to the injury-healing process and athletic performance. Must be a fifth year Athletic Training student.

MSAT 512. General Medical Conditions Assessment & Diagnosis. (3 Credits)

This course is designed to provide the learner with information regarding diseases and conditions, along with pharmaceutical drugs addressed in the profession of athletic training. Classroom and laboratory experiences will encompass classroom exercises addressing illness/condition recognition, assessment, differential diagnosis, referral, and treatment of a variety of different patient populations.

MSAT 515. Patient Centered Care. (3 Credits)

This course is designed to prepare students in the Master of Science in Athletic Training program for providing patient centered care. This course will explore health care delivery, cultural competence, ethical and legal obligations, documentation, communication skills, and professionalism, in the field of athletic training. Must be accepted into MSAT program or have instructor consent.

MSAT 525. Athletic Training Foundations with Lab. (3 Credits)

This course is designed to give the student an understanding of the foundational knowledge and skills related to the athletic training profession. The lab component is designed to give the student the opportunity to practically apply everyday skills related to the athletic training profession. Must be accepted to MSAT program or have instructor consent.

MSAT 530. Psychosocial Aspects of Athletic Training. (3 Credits)

This course is designed to define the role of the athletic trainer within the psychosocial aspect of athletic injuries. Beyond the recognition of common psychological stressors associated with the athletic population, this course will analyze and critically assess the psychosocial ramifications of athletic injuries. Discussion on the impact of the athlete's psyche as it relates to injury, rehabilitation and return to play will be addressed with a focus on educating the athlete and athletic training professional through this process. Must be accepted to MSAT program or have instructor consent. This is a CUW course.

MSAT 532. Psychosocial Principles of Athletic Training. (3 Credits)

This course is designed to analyze and critically assess the psychological and sociological phenomena associated with participation in sport and athletic injury. Discussion on the impact of the athlete's psyche as it relates to injury, rehabilitation, and return to play will be addressed with a focus on educating the athlete and athletic training professional through this process. Examines the knowledge and skills the athletic trainer must possess to recognize and intervene, and when appropriate, refer to a licensed mental health care professional.

MSAT 535. Emergency Care in Athletic Training with Lab. (3 Credits)

This course will prepare students to make appropriate decisions regarding acute injury and emergency care management, and to act proficiently on those decisions. Students will review concepts associated with American Heart Association (AHA) Basic Life Support (BLS) and first aid certification, including adult, child and infant CPR and AED. Additionally, special concerns seen in athletic populations will be addressed and practiced as they apply to the profession of athletic training. Requires acceptance to MSAT Program or instructor consent.

MSAT 541. Athletic Training Seminar. (1 Credit)

Athletic Training Seminar is designed to have all levels of Athletic Training Students meet to study specific athletic training competencies. Opportunities will also be provided for outside speakers in the medical field to present on various topics specific to athletic training competencies. Evidence-based practices will be addressed in this course. This course is taken consecutively for four semesters beginning with the third semester in the Athletic Training Program.

MSAT 542. Clinical Education I. (2 Credits)

This course is designed to formally structure clinical experience specific to the first semester of enrollment in the Athletic Training Program. It includes observation and hands-on experience at Concordia University and affiliated sites. The purpose of this course is to incorporate specific clinical proficiencies and evidence-based practice with real life athletic and injury situations.

MSAT 543. Clinical Education II. (2 Credits)

This course is designed to formally structure clinical experience specific to the second semester of enrollment in the Athletic Training Program. It includes observation and hands-on experience at Concordia University, Ann Arbor affiliated sites. The purpose of this course is to incorporate specific clinical proficiencies and evidence-based practice with real life athletic and injury situations.

MSAT 544. Clinical Education III. (3 Credits)

This course is designed to formally structure clinical experience specific to the third semester of enrollment in the athletic training program. It includes observation and hands-on experience at Concordia University, Ann Arbor affiliated sites. The purpose of this course is to incorporate specific clinical proficiencies and evidence-based practice with real life athletic and injury situations.

MSAT 545. Clinical Education IV. (3 Credits)

This course is designed to formally structure clinical experience specific to the fourth semester of enrollment in the Athletic Training Program. It includes observation and hands-on experience at Concordia University affiliated sites. The purpose of this course is to incorporate specific clinical proficiencies and evidence-based practice with real life athletic and injury situations.

MSAT 546. Clinical Education V. (3 Credits)

This course is designed to formally structure clinical experience specific to the fifth semester of enrollment in the Athletic Training Program. It includes observation and hands-on experience at Concordia University affiliated sites. The purpose of this course is to incorporate specific clinical proficiencies and evidence-based practice with real life athletic and injury situations.

MSAT 547. Clinical Education VI. (3 Credits)

This course is designed to formally structure clinical experience specific to the sixth semester of enrollment in the Athletic Training Program. It includes observation and hands-on experience at Concordia University affiliated sites. The purpose of this course is to incorporate specific clinical proficiencies and evidence-based practice with real life athletic and injury situations.

MSAT 550. Therapeutic Modalities with Lab. (3 Credits)

This course involves the study of the principles and applications of cryotherapy, thermotherapy, ultrasound, laser, diathermy, traction, and electrical stimulation. This course will explore the various applications of modalities as they relate to pain management and orthopedic injuries. Requires acceptance into MSAT program or instructor consent.

MSAT 551. Orthopedic Assessment and Management of Lower Extremity Injuries. (3 Credits)

The study of the assessment and management of athletic injuries to the lower extremity. An evidence-based practice component is addressed in this course. The lab associated with this course involves the investigation of anatomy, goniometry, and evaluation techniques in assessing and managing lower extremity injuries.

MSAT 552. Orthopedic Assessment and Management of Upper Extremity/Head/Spine Injuries. (3 Credits)

The study of the assessment and management of athletic injuries to the upper extremity, head, neck, and spine. An evidence-based practice component is addressed in this course. The lab associated with this course involves the investigation of anatomy, goniometry, and evaluation techniques in assessing and managing upper extremity, head, and spine injuries.

MSAT 553. Therapeutic Modalities for Athletic Injuries. (3 Credits)

This course introduces the student to the physiological principles and applications of cryotherapy, thermotherapy, electrostimulation, massage, intermittent compression, traction, and hydrotherapy. This course will explore the various applications of modalities as they relate to orthopedic athletic injuries.

MSAT 554. Palpatory & Functional Anatomy for Athletic Trainers. (3 Credits)

This course is an investigation of the various musculoskeletal structures of the human body. Students will learn and apply palpatory and manual muscle testing techniques in identifying musculoskeletal structures. Evidence-based practice is also addressed within this course.

MSAT 555. Therapeutic Exercise. (3 Credits)

This course involves the study, methods, and application of rehabilitation techniques as they relate to athletic injuries. An evidence-based practice component is applied to this course. This course includes a laboratory investigation of the various rehabilitation techniques used with common athletic injuries, encompassing scientific rationales, selection criteria, indications/contraindications, clinical applications, and psychological aspects of rehabilitation.

MSAT 556. Acute Emergency Care of Athletic Injuries. (3 Credits)

This course is a comprehensive course for the Athletic Training student who will initially evaluate and assess an athlete in a trauma or medical emergency situation. This course will provide hands-on experience with primary and secondary assessments, resuscitation, transportation, stabilization, adjunct airways, supplemental oxygen therapy, and athletic injury emergency care. An evidence-based practice component is addressed in this course.

MSAT 557. Advanced Injury Management. (3 Credits)

This course expands on the student's knowledge and application of therapeutic modalities and rehabilitation principles for injuries by allowing the student to synthesize previously taught treatment options with newly introduced advanced therapeutic modalities and manual therapy techniques in developing care plans for athletic injuries and conditions.

MSAT 558. Pharmacology. (3 Credits)

Pharmacology for Athletic Trainers is designed to examine pharmaceutical drug applications, interactions, and their value to the injury-healing process and athletic performance. Ergogenic aids will be reviewed in the context of their physiological application, moral and ethical values, and athletic performance. An evidence-based practice component is addressed in this course.

MSAT 559. Administration & Organization of Athletic Training. (3 Credits)

This course exposes the student to management theory, budget preparation, care, and purchase of equipment/modalities, legal considerations, athletic training facility design and management, and public relations. It also addresses the administration and organization of athletic training rooms in non-traditional settings.

MSAT 560. Recognition & Evaluation of Orthopedic Injuries I with Lab. (4 Credits)

This course involves the in-depth study of the orthopedic assessment of the head and face, foot, ankle, lower leg, and knee. Specifically, course information will include taking a complete medical history, inspecting the area, measuring range of motion, proper performance and interpretation of neurologic and special tests, determining a differential diagnosis, proper documentation, and coming to a clinical diagnosis based on the information obtained. Requires acceptance into MSAT program or instructor consent.

MSAT 561. Recognition & Evaluation of Orthopedic Injuries II with Lab. (4 Credits)

This course involves the in-depth study of the orthopedic assessment of the shoulder, upper arm, elbow, forearm, wrist, and hand. Specifically, course information will include taking a complete medical history, inspecting the area, measuring range of motion, proper performance and interpretation of neurologic and special tests, determining a differential diagnosis, proper documentation, and coming to a clinical diagnosis based on the information obtained.

MSAT 562. Recognition & Evaluation of Orthopedic Injuries III with Lab. (4 Credits)

This course involves the in-depth study of the orthopedic assessment of the spine, pelvis and related structures. Specifically, course information will include taking a complete medical history, inspecting the area, measuring range of motion, proper performance and interpretation of neurologic and special tests, determining a differential diagnosis, proper documentation, and coming to a clinical diagnosis based on the information obtained.

MSAT 565. Rehabilitation Techniques of Orthopedic Injuries I with Lab. (3 Credits)

This course involves the study, methods, and application of rehabilitation techniques as they relate to orthopedic injuries. Requires acceptance into MSAT program or instructor consent.

MSAT 566. Rehabilitation Techniques of Orthopedic Injuries II with Lab. (3 Credits)

This course expounds on the student's knowledge of the study, methods, and application of rehabilitation techniques as they relate to orthopedic injuries. It involves an examination of human movement mechanics in applied settings.

MSAT 568. Research Methods in Sports Medicine. (3 Credits)

This course provides an examination of the research methods commonly used to design, implement and evaluate research in athletic training. The course includes the study of descriptive, quantitative and qualitative research methods, as well as techniques of literature review and reporting of research. Students completing this course should have a draft of a research proposal that can be used for a thesis.

MSAT 569. Research Methods. (3 Credits)

This course explores methods commonly used to design, implement and appraise sports medicine research including a review of statistical methods, epidemiology, and evidence-based practice. The course includes examination of descriptive, quantitative and qualitative research methods. Students completing this course will draft a literature review of a sports medicine-related topic. Requires acceptance into MSAT program or instructor consent.

MSAT 570. Internship in Athletic Training. (1-3 Credits)

This course is designed to expose students to various aspects involved with health care and rehabilitation in either a clinical or non-clinical setting. Although the student is only at the pre-professional level, he/she can be involved in the observation, assistance, and discussion of patients' treatment and care, as the experienced professional deems appropriate.

MSAT 571. Advanced Practice Administration in Athletic Training. (3 Credits)

This course will prepare students for advanced practice and administrative roles in the athletic training field. It will explore organizational structure and employment considerations at the University, Clinic/Hospital, and Outreach settings. This course will prepare the student for assuming administrative roles and managing resources as well as explore the facets of teaching and mentoring students and young professionals in the athletic training field.

MSAT 572. Adv Musculoskeletal Anatomy. (3 Credits)

is designed for students seeking to gain a higher level understanding of human anatomy. The course will provide a comprehensive review of human cadaver anatomy for health professionals. Major muscles, skin, bones and joints, internal organs, blood vessels, the brain, spinal cord and major nerves will be covered. The students will use dissected cadavers to study anatomical variations, pathologies, and changes due to disease/injury. The students enrolled in the course will attend clinical lectures followed by cadaver exploration and identification. 3 credits.

MSAT 573. Athletic Training Capstone. (1-6 Credits)

The purpose of this course is to provide a research experience for the advanced student of athletic training. Toward this goal, the student will refine their ability to read critically, write effectively, communicate effectively through speech, and think critically and creatively. The student will choose a capstone research project, which will culminate in a potentially publishable paper and a formal presentation of the project to the faculty of the Health and Human Performance department. This is an independent project. Through this research project, the student will learn to analyze quantitative or qualitative research, evaluate ethical considerations of that research, and use technology to support their project.

MSAT 574. General Medical Conditions with Lab. (4 Credits)

This course is designed to provide the learner with information regarding the pathophysiology of diseases and conditions encountered in the profession of athletic training. Classroom and laboratory experiences will encompass addressing illness/condition recognition, assessment, differential diagnosis, referral, and treatment of a variety of patient populations. Additionally, the course will examine pharmaceutical drug applications, interactions, and their value to the injury-healing process and athletic performance. Requires acceptance into MSAT program or instructor consent.

MSAT 575. Case Studies in Athletic Training. (3 Credits)

This course is designed to allow students to employ their knowledge base and data-gathering skills gained during clinical education and coursework. Students will analyze and evaluate the management of healthcare related patient cases. The course will utilize both self-directed and peer group based learning.

MSAT 578. Pharmacology for Athletic Trainers. (3 Credits)

Pharmacology for Athletic Trainers is designed to examine pharmaceutical drug applications, interactions, and their value to the injury-healing process and athletic performance. Ergogenic aids will be reviewed in the context of their physiological application, moral and ethical values, and athletic performance. An evidence-based practice component is addressed in this course.

MSAT 579. Administration & Management in Athletic Training. (4 Credits)

This course is designed to prepare students for the administrative and management responsibilities of an entry-level athletic trainer. This course will explore payor systems, systems of quality assurance and quality improvement, health informatics, resource management, policies and procedures, advocacy, and professional growth. Requires acceptance to MSAT program or instructor consent.

MSAT 580. Athletic Training Clinical I. (1 Credit)

This course is designed to formally structure clinical experience specific to the first semester of enrollment in the Master of Science in Athletic Training program. Students will observe and gain hands-on experience in recognition, diagnosis, and management of injuries and illnesses at Concordia University affiliated clinical sites under the supervision of a preceptor. The purpose of this course is to incorporate specific clinical proficiencies with real life injury situations. Requires acceptance to MSAT program.

MSAT 581. Athletic Training Clinical II. (2 Credits)

This course is designed to formally structure clinical experience specific to the second semester of enrollment in the Master of Science in Athletic Training program. Students will observe and gain hands-on experience in recognition, diagnosis, and management of injuries and illnesses at Concordia University affiliated clinical sites under the supervision of a preceptor. The purpose of this course is to incorporate specific clinical proficiencies with real life injury situations.

MSAT 582. Athletic Training Clinical III. (3 Credits)

This course is designed to formally structure clinical experience specific to the third semester of enrollment in the Master of Science in Athletic Training program. Students will observe and gain hands-on experience in recognition, diagnosis, and management of injuries and illnesses at Concordia University affiliated clinical sites under the supervision of a preceptor. The purpose of this course is to incorporate specific clinical proficiencies with real life injury situations.

MSAT 583. Athletic Training Clinical IV. (3 Credits)

This course is designed to formally structure clinical experience specific to the fourth semester of enrollment in the Master of Science in Athletic Training program. Students will observe and gain hands-on experience in recognition, diagnosis, and management of injuries and illnesses at Concordia University affiliated clinical sites under the supervision of a preceptor. The purpose of this course is to incorporate specific clinical proficiencies with real life injury situations.

MSAT 584. Athletic Training Clinical V. (3 Credits)

This course is designed to formally structure clinical experience specific to the last year of enrollment in the Master of Science in Athletic Training program. Students will observe and gain hands-on experience in recognition, diagnosis, and management of injuries and illnesses at Concordia University affiliated clinical sites under the supervision of a preceptor. The purpose of this course is to incorporate specific clinical proficiencies with real life injury situations.

MSAT 585. Seminar in Athletic Training III. (3 Credits)

This course is designed to formally prepare the student for the transition into the workforce. The course will focus on preparing the student for the Board of Certification Examination. It will also focus on professional development and strategies for obtaining viable employment post-graduation, such as cover letter and resume refinement, employment search and application strategies, and interview strategies.

MSAT 590. Immersion Experience in Athletic Training. (6 Credits)

This course is designed to formally structure clinical experience specific to the last year of enrollment in the Master of Science in Athletic Training program. Students will be fully immersed in the responsibilities of the clinical site, gaining hands-on experience with recognition, diagnosis, and management of injuries and illnesses and daily setting-specific administrative tasks at Concordia University affiliated clinical sites under the supervision of a preceptor.

MSAT 595. Capstone. (3 Credits)

This course is designed to help the student hone their research skills through the execution of a rigorous project under the advisement of a faculty member. Students will propose a capstone project, obtain approval from a majority of the Athletic Training Faculty, create a scholarly product, and disseminate the project in a public forum.
Prerequisite: MSAT 569.

MSAT 599. Thesis in Athletic Training. (3 Credits)

This course is designed to help students hone their research skills through the implementation of a research proposal under the advisement of a faculty member. Students will propose a research project, obtain IRB approval, perform data collection, and analyze their data. Additionally, students will create a complete thesis document. Students are expected to work semi-independently with their thesis adviser and must produce scholarly work. Students must also orally defend the thesis to faculty.

MSAT 600. Thesis. (3 Credits)

This course is designed to help students hone their research skills through the implementation of a research proposal under the advisement of a faculty member. Students will propose a research project, obtain IRB approval, perform data collection, and analyze their data. Additionally, students will create a complete thesis document. Students are expected to work semi-independently with their thesis adviser and must produce scholarly work. Students must also orally defend the thesis in a public forum.

Prerequisite: MSAT 569.