

ATHLETIC TRAINING (MSAT)

MSAT 5100. 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 5110. 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 5120. 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.

Prerequisites: (BIO 191 or 1801) and (BIO 192 or 1802) and (HHP 274 or 2274).

MSAT 5130. 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.

Prerequisites: (BIO 191 or 1801) and (BIO 192 or 1802) and (HHP 274 or 2274).

MSAT 5200. 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 5210. 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 5220. 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.

Prerequisites: (BIO 191 or 1801) and (BIO 192 or 1802) and (HHP 274 or 2274) and (MSAT 551 or 5120).

MSAT 5230. 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.

Prerequisites: (HHP 274 or 2274).

MSAT 5240. 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 5500. 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.

MSAT 5510. 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.

MSAT 5520. Athletic Training Foundations. (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 5530. Athletic Training Clinical I. (1 Credit)

This course is designed to formally structure clinical experience specific to the first or 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 5540. 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.

MSAT 5550. Recognition & Evaluation of Orthopedic Injuries I. (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.

MSAT 5560. Emergency Care in Athletic Training. (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.

MSAT 5570. 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 5600. 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.

MSAT 5610. Rehabilitation Techniques of Orthopedic Injuries I. (3 Credits)

This course involves the study, methods, and application of rehabilitation techniques as they relate to orthopedic injuries.

MSAT 5620. Recognition & Evaluation of Orthopedic Injuries II. (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 5630. 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 5640. Therapeutic Modalities. (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.

MSAT 6100. 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 6110. 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.

Prerequisites: (MSAT 543 or 5210).

MSAT 6120. 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.

Prerequisites: (MSAT 553 or 5130) and (MSAT 555 or 5230).

MSAT 6200. 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 6210. 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.

Prerequisites: (MSAT 544 or 6110).

MSAT 6220. 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.

Prerequisites: (BIO 191 or 1801) and (BIO 192 or 1802) and (HHP 274 or 2274) and (HHP 342 or 3342).

MSAT 6230. 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 6500. 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.

MSAT 6510. Rehabilitation Techniques of Orthopedic Injuries II. (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 6520. Recognition & Evaluation of Orthopedic Injuries III. (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 6530. Athletic Training Clinical IV. (3 Credits)

This course is designed to formally structure clinical experience specific to the fourth or fifth 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 6540. General Medical Conditions. (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.

MSAT 6575. 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 6600. 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 will complete a literature review of a sports medicine-related topic.

MSAT 6610. 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 6620. Advanced Musculoskeletal Anatomy. (3 Credits)

This course 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.

MSAT 6630. Athletic Training Clinical V. (3 Credits)

This course is designed to formally structure clinical experience specific to the fifth or sixth 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 7100. 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 7200. 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.

Prerequisites: (MSAT 568 or 6230).

MSAT 7250. 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 7500. 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 7800. 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.