SPORTS MEDICINE (SMD)

College of Health Sciences

Courses

SMD 500. Human Cadaver Anatomy. 2 Credits.
A regional study of the gross structure of the human body and human cadaver dissection covering the back, upper and lower limbs, head, neck, thorax, abdomen and pelvis. Emphasis is on the structure and function of the skeletal, muscular and peripheral nervous systems.
Pre / Co requisites: SMD 500 requires a corequisite of SMD 501.

SMD 501. Human Cadaver Dissection. 4 Credits.
A human cadaver dissection course accompanying SMD 500. The gross structures of the back, upper and lower limbs, head and neck, and thorax, abdomen and pelvis are studied.
Pre / Co requisites: SMD 501 requires a corequisite of SMD 500.

SMD 502. Prevention & Care of Injury and Illness. 3 Credits.
This course builds upon students’ existing knowledge of basic life support and first aid, providing an avenue for practice and discussion of advanced first aid techniques and management of sport-related medical emergencies. The course also takes an evidence-based approach to common athletic injuries, principles of injury prevention, and the application of taping and bracing techniques used in athletic training.
Pre / Co requisites: SMD 502 requires current CPR for the professional rescuer certification. Typically offered in Summer.

SMD 503. Principles of Rehabilitation. 3 Credits.
The purpose of this course is to expose students to evidence based practice (EBP) and demonstrate the impact it has on clinical practice in the profession of athletic training and other allied health care professions. Students will be given all the necessary background information on EBP research design, tools to critically appraise, and will be equipped to perform an original EBP design or an analysis of consolidated EBP research. This course is designed to provide students with a greater understanding of how to prudently interpret research results as it pertains to influencing change in clinical practice.
Pre / Co requisites: SMD 503 requires prerequisite MAT 121 or equivalent.

SMD 504. Therapeutic Agents. 3 Credits.
Therapeutic agents used in athletic training are presented with regards to physiological effects, physics, indications/contraindications as well as the evidence-based practice for appropriate agent selection.
Pre / Co requisites: SMD 504 requires prerequisite or co-requisite of SMD 502. Typically offered in Spring.

SMD 505. Evidence Based Practice in Sports Medicine. 3 Credits.
The purpose of this course is to expose students to evidence-based practice (EBP) and demonstrate the impact it has on clinical practice in the profession of athletic training and other allied health care professions. Students will be given all the necessary background information on EBP research design, tools to critically appraise, and will be equipped to perform an original EBP design or an analysis of consolidated EBP research. This course is designed to provide students with a greater understanding of how to prudently interpret research results as it pertains to influencing change in clinical practice.
Pre / Co requisites: SMD 505 requires prerequisite or co-requisite of SMD 502. Typically offered in Summer.

SMD 510. Orthopedic Assessment 1. 3 Credits.
A comprehensive approach to the assessment and diagnosis of lower extremity and shoulder musculoskeletal injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions.
Typically offered in Summer.

SMD 511. Orthopedic Assessment 2. 3 Credits.
A comprehensive approach to the assessment and diagnosis of the spine, thorax, upper extremity musculoskeletal and head injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions.
Pre / Co requisites: SMD 513 requires prerequisite of SMD 512. Typically offered in Fall.

SMD 514. General Medical Conditions and Pharmacology in Athletic Training. 3 Credits.
A presentation of the pathology, pharmacology, and management strategies relevant to sports medicine. Emphasis will be on non-orthopaedic conditions commonly encountered in a physically active population.
Typically offered in Spring.

SMD 515. Athletic Training Clinical Experience 1. 3 Credits.
Clinical experience is provided in sports medicine settings. The student will have the opportunity to implement athletic training knowledges, skills and abilities while developing clinical reasoning and critical thinking in the delivery of health care. Emphasis with equipment intensive sports.
Pre / Co requisites: SMD 515 requires prerequisites of SMD 502 and SMD 512. Typically offered in Fall.

SMD 516. Athletic Training Clinical Experience 2. 3 Credits.
Clinical experience is provided in sports medicine settings. The student will have the opportunity to implement athletic training knowledges, skills and abilities while developing clinical reasoning and critical thinking in the delivery of health care. Emphasis with equipment intensive sports.

SMD 517. Athletic Training Clinical Experience 3. 3 Credits.
Clinical experience is provided in sports medicine settings. The student will have the opportunity to implement athletic training knowledges, skills and abilities while developing clinical reasoning and critical thinking in the delivery of health care. Emphasis with equipment intensive sports.
Pre / Co requisites: SMD 517 requires prerequisite of SMD 516. Typically offered in Fall.

SMD 518. Athletic Training Clinical Experience 4. 3 Credits.
Clinical experience is provided in sports medicine settings. The student will have the opportunity to implement athletic training knowledges, skills and abilities while developing clinical reasoning and critical thinking in the delivery of health care. Emphasis with equipment intensive sports.
Pre / Co requisites: SMD 518 requires prerequisite of SMD 517. Typically offered in Spring.

SMD 519. Athletic Training Clinical Experience 5. 3 Credits.
Clinical experience is provided in sports medicine settings. The student will have the opportunity to implement athletic training knowledges, skills and abilities while developing clinical reasoning and critical thinking in the delivery of health care. Emphasis with equipment intensive sports.
Pre / Co requisites: SMD 519 requires prerequisite of SMD 518. Typically offered in Spring.

SMD 520. Prevention & Care of Injury and Illness. 3 Credits.
This course builds upon students’ existing knowledge of basic life support and first aid, providing an avenue for practice and discussion of advanced first aid techniques and management of sport-related medical emergencies. The course also takes an evidence-based approach to common athletic injuries, principles of injury prevention, and the application of taping and bracing techniques used in athletic training.
Pre / Co requisites: SMD 520 requires current CPR for the professional rescuer certification. Typically offered in Summer.

SMD 521. Orthopedic Assessment 1. 3 Credits.
A comprehensive approach to the assessment and diagnosis of lower extremity and shoulder musculoskeletal injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions.
Typically offered in Summer.

SMD 522. Orthopedic Assessment 2. 3 Credits.
A comprehensive approach to the assessment and diagnosis of the spine, thorax, upper extremity musculoskeletal and head injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions.
Pre / Co requisites: SMD 513 requires prerequisite of SMD 512. Typically offered in Fall.

SMD 523. General Medical Conditions and Pharmacology in Athletic Training. 3 Credits.
A presentation of the pathology, pharmacology, and management strategies relevant to sports medicine. Emphasis will be on non-orthopaedic conditions commonly encountered in a physically active population.
Typically offered in Spring.

SMD 524. Prevention & Care of Injury and Illness. 3 Credits.
This course builds upon students’ existing knowledge of basic life support and first aid, providing an avenue for practice and discussion of advanced first aid techniques and management of sport-related medical emergencies. The course also takes an evidence-based approach to common athletic injuries, principles of injury prevention, and the application of taping and bracing techniques used in athletic training.
Pre / Co requisites: SMD 524 requires current CPR for the professional rescuer certification. Typically offered in Summer.

SMD 525. Orthopedic Assessment 1. 3 Credits.
A comprehensive approach to the assessment and diagnosis of lower extremity and shoulder musculoskeletal injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions.
Typically offered in Summer.

SMD 526. Orthopedic Assessment 2. 3 Credits.
A comprehensive approach to the assessment and diagnosis of the spine, thorax, upper extremity musculoskeletal and head injuries including the identification of risk factors, the role of clinical outcome measures, and appropriate referral decisions.
Pre / Co requisites: SMD 513 requires prerequisite of SMD 512. Typically offered in Fall.

SMD 527. General Medical Conditions and Pharmacology in Athletic Training. 3 Credits.
A presentation of the pathology, pharmacology, and management strategies relevant to sports medicine. Emphasis will be on non-orthopaedic conditions commonly encountered in a physically active population.
Typically offered in Spring.
SMD 640. Injury Risk and Prevention Strategies. 3 Credits.
The purpose of this course is to expose students to injury prevention programs and research, including topics such as concussion, overuse, upper and lower extremity, and heat injuries as well as the female athlete triad. Injury prevention research discussed relates to the athletic as well as other special populations, such as athletes with an injury history, military population, and females. Students will be equipped to clinically integrate injury prevention programs, including educating the athlete, coaches, and other allied health professionals. This course is designed to provide students with a greater understanding of how to select injury prevention programs as it pertains to influencing change in clinical practice. Typically offered in Summer.

SMD 654. Sport Physiology in Various Populations and Environments. 3 Credits.
This course will cover the advanced physiology of all major body systems during participation in sport and exercise with special attention to different populations such as body size, gender and age. The physiology of how the body reacts and adapts to exercise in different environmental conditions will be covered with special attention different populations. Typically offered in Fall.

SMD 693. Selected Topics in Sports Medicine. 3 Credits.
A second year graduate course covering environmental topics, theory and practice of evidence-based sports medicine, educational and course assessment concerns for sports medicine professionals. Repeatable for Credit.