

Midwestern State University
Department of Athletic Training and Exercise Physiology
EXPH 5083 Science Behind Injury & Rehabilitation (3 Credit)

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Office Hours: By appointment

Course Meeting Time: Online/Virtual

Important Dates:

First day of Class:	Tuesday, January 21
Last day to add/drop	Friday January 23
Spring Break	March 9-13
Exam I (midterm):	Monday, March 3
Exam II (Final):	Monday, May 11

Texts/Materials:

There will be a text required for this course: Sports Injuries: Prevention, Treatment, and Rehabilitation 5th Ed., Peterson, Renstrom, and Lynch, Routledge, ISBN: 9780367522049. Relevant reading materials for each class session will be provided in the form of research articles and selected book chapters through Desire2Learn, as well.

Course Description:

This online course is designed to develop knowledge regarding specific noted injuries (i.e., acute, chronic), theory and clinical application of injury rehabilitation and therapeutic exercise used for exercise physiologists to restore patients, clients, athletes and other physically active individuals to their pre-injury levels of fitness, strength, power, endurance and speed.

Course Objectives:

- Students will demonstrate through discussion and written evaluations the etiology and mechanisms of physical injury or trauma.
- Students will demonstrate through discussion and written evaluations the theoretical concepts, components and phases of a rehabilitation program.
- Students will demonstrate through discussion and written evaluations the indications and contraindications of therapeutic exercises, as well as the progress of the rehabilitation protocol.
- Students will demonstrate through discussion and written evaluations the process of implementing a therapeutic exercise protocol, assess the patients progress and make changes when needed to progress the recovery and return to activity.
- Students will demonstrate through discussion and written evaluation the role of surgery in the repair/modification of bone/tissue to facilitate the return of the patient to activity.

Course Evaluation:

Exam I	25%
Exam II	25%
Assignments	50%

Grading Scale: **A: ≥ 90 ; B: $89.99 - 80$; C: $79.99 - 70$**

Examinations:

There will be two examinations during the semester. The format of these examinations will be primarily essay incorporating material from previously presented readings/power points. Application questions may also be included to test each student's critical thinking. The exams will be worth 50% of the overall course grade.

Assignments:

Selected readings from the literature will be provided weekly. It is the responsibility of the student to read each assigned article. For each reading/article, there will be a list of questions which need to be answered for credit to be awarded. The questions will be relevant to the methodology, results, and discussion points of the readings. The questions will be provided at the beginning of each week along with the corresponding articles. The answers to each of the questions will be due at the end of the respective week. Each assignment will be worth 20 points, while being worth 50% of the overall course grade. NO LATE WORK WILL BE ACCEPTED.

Academic Dishonesty:

The MSU Student Handbook covers Academic Honesty under University Policies (https://msutexas.edu/student-life/_assets/files/handbook.pdf) and

Procedures. Academic dishonesty is defined as cheating, collusion, and plagiarism.

- Cheating is (1) the use of any unauthorized assistance, (2) dependence upon the aid of sources beyond those authorized by the Instructor, or (3) acquisition, without permission, of tests or other academic material.
- Plagiarism is the use of another person's published or unpublished work without full and clear acknowledgment.
- Collusion is collaboration with another person in preparing work offered for credit if the faculty member in charge does not authorize that collaboration.

The use of artificial intelligence (AI), such as ChatGTP is prohibited in this course. Students are required to provide original thoughts and ideas related to the topic area when prompted, such as for written assignments and essay questions on exams.

College Policies**Campus Carry Rules/Policies**

Refer to: [Campus Carry Rules and Policies](#)

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designated- smoking areas at each location.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University- sponsored activities.

Pregnant and Parenting Students

To support the academic success of pregnant and parenting students and students with pregnancy related conditions, the University offers reasonable modifications based on the student's particular needs. Any student who is pregnant or parenting a child up to age 18 or has conditions related to pregnancy, may contact MSU's designated Pregnancy and Parenting Liaison to discuss support available through the University. The Liaison can be reached by emailing ruby.garrett@msutexas.edu or calling 940-397-4500. Should a student communicate with me that they are pregnant or have a pregnancy related condition or may need additional resources related to pregnancy or parenting, I will communicate that student's information to the Title IX Coordinator, who will work with the student and others, as needed, to ensure equal access to the University's education program or activity.

A pregnant student, a parenting student, or a student with pregnancy related conditions may be provided with supportive measures, based on the student's individualized needs, analogous to those provided to a student with a temporary medical condition, and provided such supportive measures do not fundamentally alter the nature of an education program or activity. Such supportive measures may include, but are not limited to:

For pregnant students:

- (1) Providing breaks during class to express breast milk, breastfeed, or attend to health needs associated with pregnancy or related conditions, including eating, drinking, or using the restroom;
- (2) Excusing intermittent absences to attend medical appointments;
- (3) Providing access to online or homebound education, including the providing of access to instructional materials and video recordings of lectures (to the extent such materials, recordings are made available to any student with an excused absence);
- (4) Facilitating changes in schedule or course sequence, including extensions of time for coursework and rescheduling of tests and examinations and/or providing opportunity to make up missed assignments/assessments (such time extensions shall be applied in the same manner as the University grants and provides ADA/504 accommodations for additional time);
- (5) Allowing a student to sit or stand, or carry or keep water nearby;
- (6) Offering counseling;
- (7) Facilitating changes in physical space or supplies (for example, access to a larger desk or a footrest);

- (8) Allowing the student to maintain a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals or unborn children;
- (9) Providing elevator access;
- (10) Facilitating a voluntary leave of absence from the University if the student is in good academic standing at the time the student takes a leave of absence, and facilitating a return to the student's degree or certificate program without being required to reapply for admission if the student remains in good academic standing; or
- (11) Making other necessary changes to policies, practices, or procedures.

For Parenting Students:

- (1) Facilitating priority registration to the extent the University provides early registration for any other group of students; or
- (2) Facilitating a voluntary leave of absence from the University if the student is in good academic standing at the time the student takes a leave of absence, and facilitating a return to the student's degree or certificate program without being required to reapply for admission.

Obligation to Report Sex Discrimination under State and Federal Law

Midwestern State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. State and federal law require University employees to report sex discrimination and sexual misconduct to the University's Office of Title IX. As a faculty member, I am required to report to the Title IX Coordinator any allegations, personally observed behavior, or other direct or indirect knowledge of conduct that reasonably may constitute sex discrimination or sexual misconduct, which includes sexual assault, sexual harassment, dating violence, or stalking, involving a student or employee. After a report is made, the office of Title IX will reach out to the affected student or employee in an effort to connect such person(s) with resources and options in addressing the allegations made in the report. You are also encouraged to report any incidents to the office of Title IX. You may do so by contacting:

Laura Hetrick
Title IX Coordinator
Sunwatcher Village Clubhouse
940-397-4213
laura.hetrick@msutexas.edu

You may also file an online report 24/7 at
https://cm.maxient.com/reportingform.php?MSUTexas&layout_id=6
Should you wish to visit with someone about your experience in confidence, you may contact the MSU Counseling Center at 940-397-4618. For more information on the University's policy on Title IX or sexual misconduct, please visit <https://msutexas.edu/titleix/>

Tentative Topics

Week 1: Chapter 1: Sports Medicine/Injuries in Sport and Society
Chapter 2: Risk Factors for Sports Injuries

Week 2: Chapter 3: Equipment in Sports – Principles
Chapter 4: Braces and Taping used in Sport

Week 3: Chapter 7: Treatment Principles and Options – An Overview
Chapter 8: Rehabilitation Principles

Week 4: Chapter 12: Head and Face Injuries

Week 5: Chapter 13: Throat, Chest, and Abdominal Injuries in Sport
Chapter 14: Back/Spine Injuries in Sport

Week 6: Chapter 9: Shoulder and Upper Arm Injuries in Sports

Week 7: Chapter 10: Elbow Injuries in Sport
Chapter 11: Forearm, Wrist, and Hand Injuries in Sport

Week 8: Chapter 15: Groin, Pelvis and Hip Injuries in Sport
Chapter 16: Thigh Injuries in Sport

Week 9: Chapter 17: Knee Injuries in Sport

Week 10: Chapter 18: Lower leg injuries in sport

Week 11: Chapter 19: Ankle Injuries in Sport

Week 12: Chapter 20: Foot Injuries in Sport

Week 13: Chapter 21: Growing Athletes – Special Considerations

Week 14: Chapter 22: Outdoor Activity Risks and Sports During Extreme Conditions

Week 15: Chapter 23: Disabled Athletes' Injuries

Week 16: Final Exam

