



Department of Athletic Training and Exercise
Physiology

EXPH 4703 - Clinical Exercise Physiology

Day and Time: Tuesday/Thursday - 8:00 - 9:20 am

Location: Room 223, D.L. Ligon Coliseum

Instructor: Brett Crossland, Ph.D.

Email: brett.crossland@msutexas.edu

Telephone: 940-397-4956

Office: 208 Ligon Coliseum

Office Hours: MW - 9:00-11:30 am, TR - 9:30 - 11:00 am

Important Dates:

First Day of Class – Tuesday, January 20

Spring Break - March 9-14 (No Class)

Easter Break - April 2-5 (No Class)

Last Day of Class - May 7

Exam I - February 19

Exam II - March 26

Exam III - April 21

Final Exam – Thursday, May 14, 8-10:00 am

Textbook: No textbook is required for this course. All required reading materials will be provided via D2L by the instructor.

Course Objectives:

1. Gain the ability to explain and perform various exercise tests to determine individual fitness status.
2. Understand the effects of acute and chronic exercise on measures of health and wellness.
3. Develop the skills necessary to record and interpret EKG.
4. Determine the appropriate mode / frequency / duration / intensity for exercise in individuals with chronic disease.
5. Identify and explain the cardiovascular system and the expected response during various forms of exercise.

Course Evaluation: Evaluation of the course material will be broken down between five (5) quizzes throughout the semester, two (2) group exercise projects, and three (3) exams. Exams will be in person and worth 50% of your overall grade. **MAKE UP EXAMS WILL NOT BE GIVEN AFTER THE SCHEDULED DATE.**

Group Exercise Project

As a part of a group, students will work together to design a 4-week exercise prescription for two (2) participants. The complete assignment will be worth 75 points for each participant and include a needs analysis, exercise prescription, video explanation, and a written prescription summary. In addition, participants will evaluate each exercise prescription and provide their feedback. The group with the best participant feedback will receive 150 pts for the assignment.

A. Quizzes (5 @ 20 pts each)	100 pts	14%
B. Group Exercise Projects (2 @ 100 pts each)	200 pts	<u>28%</u>
C. Exams (4 @ 100 pts each)	<u>400 pts</u>	<u>58%</u>
Total: 700 pts		100%

GRADING SCALE:

Grades will be assigned on the following points needed:

A: $\geq 90.00\%$	≥ 630
B: 80.00-89.99%	560-629
C: 70.00-79.99%	490-559
D: 60.00-69.99%	420-489
F: $\leq 59.99\%$	419 pts and below

Attendance

Attendance at class is **compulsory** if you intend on performing well in this course. Attendance will be taken for each class period. If you are not feeling well, I encourage you to stay away from the classroom. Lectures will not be recorded so it is your responsibility to get notes from fellow classmates.

Classroom Policies: It is assumed that everyone enrolled in this course is here to pursue further knowledge in the area of human movement. The following list provides what will be expected by the instructor and should also be expected by the students:

1. Attendance in class is expected. If you will not be able to participate in a class session please notify the instructor **PRIOR** to your absence in a timely manner. Only those with excuses that are related to University events (academic, athletic, etc.) or religious purposes may make-up work. If you have an excused absence and will not be available for an exam (**EXCLUDING the FINAL EXAM**) you must take the exam **PRIOR** to your absence (**NO EXCUSES!!**). Those individuals who do not have an excuse for an absence will receive a zero score for that day's evaluation. If you fail to inform the instructor in a timely manner of your absence, then any make-up work performed will be worth 50% of the original work.

2. Turn off all cell phones, pagers, and any other electronic devices before class begins. It is disrupting to other students, and disturbing to the instructor if these electronic devices are active during the class period.
3. If you have a question that was not answered during the class period please feel free to stop by my office or email me your question (see front page).
4. Neither academic dishonesty nor plagiarism will be tolerated and as such, disciplinary action will be issued in accordance with university guidelines.

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please see: <http://www.mwsu.edu/studentlife/disability>.

Tentative Course Schedule

Week	Date	Topic	Assignments
1	1/20	The Profession of Clinical Exercise Physiologist	
1	1/22	Aerobic Testing & Prescription	
2	1/27	Aerobic Testing & Prescription	
2	1/29	Anaerobic Testing & Prescription	Quiz #1 - Due 2/2
3	2/3	Anaerobic Testing & Prescription	
3	2/5	Cardiovascular System / Interview #1	
4	2/10	Anatomy of the Heart / Innervation / Interview #2	
4	2/12	The Cardiac Cycle	
5	2/17	Autonomic Nervous System	Quiz #2 - Due 2/16
5	2/19	EXAM #1	
6	2/24	Cardiovascular Adaptations	
6	2/26	TACSM - NO CLASS	Needs Analysis - Due 3/1
	3/3	Cardiovascular Response to Exercise-HR	
7	3/5	Cardiovascular Response to Exercise-SV/Q	
7	3/17	Cardiovascular Response to Exercise-BP	Quiz #3 - Due 3/9
9	3/19	Cardiac Monitoring	
9	3/24	Cardiovascular Dysfunction	Ex RX - Due 3/22

10	3/26	EXAM #2	
10	3/31	Electrophysiology / EKG Introduction	Video - Due 3/29
11	4/7	EKG Analysis / Arrhythmias	
11	4/9	EKG Analysis / Junctional Arrhythmias	Quiz #4 - Due 4/6
12	4/14	EKG Analysis / Ventricular Arrhythmias	
12	4/16	EKG Analysis / AV & BB Blocks	Quiz #5 - Due 4/19
13	4/21	EXAM #3	
13	4/23	Exercise for Longevity	Summary - Due 4/26
14	4/28	Exercise for Longevity Cont.	
14	4/30	Exercise for Heart Health	
15	5/5	Exercise for Brain Health	
15	5/7	Exercise for Body Composition	
16	5/8	Exercise for Performance	
	5/14	FINAL EXAM	8-10:00 am

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.

Generative AI Policy

This course assumes that work submitted for a grade by students – all process work, drafts, brainstorming artifacts, final works – will be generated by the students themselves, working individually or in groups as directed by class assignment instructions. This policy indicates the following constitute violations of academic honesty: a student has another person/entity do the work of any substantive portion of a graded assignment for them, which includes purchasing work from a company, hiring a person or company to complete an assignment or exam, and/or using generative AI tools (such as ChatGPT).