



Course Syllabus: Intro to Exercise Physiology
Spring 2022 EXPH 1904-201
MWF 10-10:50 am (CE240), F 9-9:50 am (Lab, CE240)
Department of Athletic Training & Exercise Physiology

Contact Information

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**This is by appointment or arranged ahead of time. Please e-mail me to arrange a meeting either "in-person" or "virtually" regarding a question or concern.

Course Description

This course has been planned as an in-person format for Spring 2022. The class will meet in its regularly scheduled room but will utilize social distancing and an assigned seating chart. I will use D2L for posting syllabi, course communication, course schedule, attendance, and gradebook. You should regularly check D2L and the email hosted via D2L for important course information. In the event of increased incidence and risk of COVID-19 that results in the university moving back to a shelter-in-place mode or so, the course instruction will transition to fully online. More instructions will be given at that time.

The EXPH 1904 course will introduce the principles of human physiology in sports, exercise, and training regarding body systems and performance. Upon successful completion of this course, students will be able to:

1. Gain an appreciation of the basic scientific foundations of exercise physiology.
2. Describe the structures and functions of physiological systems in the body.
3. Understand selected physiological mechanisms responsible for adaptations to exercise.
4. Apply practical knowledge of exercise physiology to various health, fitness and athletic fields.
5. Increase awareness of exercise physiology laboratory measurements and practice an array of exercise physiology tests.

Textbook

A) **Required book:** Kenney, W. L., Wilmore, J. H., and Costill, D. L. Physiology of Sport and Exercise, 8th edition, Champaign, IL: Human Kinetics. (7th edition will be accepted)

B) **Suggested book:** Kraemer, W. J., Fleck, S. J., and Deschenes, M. R. Exercise Physiology: Integrating Theory and Application, 2nd edition, Philadelphia, PA: Wolters Kluwer.

Study Hours and Tutoring Assistance

There will be 2-3 study hall sessions prior to each EXAM by GAs.

**If you attend the study hall, you will get a bonus point (one point per session) from the scheduled EXAM.

Student Handbook 2021-22

Refer to: [msutexas.edu](https://msutexas.edu/student-life/_assets/files/handbook) › [student-life](#) › [_assets](#) › [files](#) › [handbook](#)

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

Grading

Course Grade - Grades will be based on your performance in the following areas:

Table 1: Percentages allocated to each assignment.

Assignments		%
Exam 1, 3, 4	3*15%	45
Exam 2	1*10%	10
Chapter activities	10*1%	10
Quizzes	10*1%	10
Class attendance		10
Lab reports	11*1%	11
Lab attendance & attitudes		4
Total		100

Table 2: Total percentages for final grade.

Grade	%
A	90-100
B	80-89
C	70-79
D	60-69
F	< 60

Chapter activities

There are assigned questions in each chapter by weekly base for this course. You will find the assigned questions on D2L-> Content-> Chapter activity. You MUST turn in each chapter activity assigned Wednesday at the beginning of class. Assignments will not be taken after the start of class. **No electronic submission.**

MUST be handwritten. There may be an extra credit question(s), and the credit(s) will be added to scheduled exams. If you completed few questions not all, you still should submit it then you can get a partial credit.

Quizzes

There are timed quizzes by weekly base for this course through the D2L system. Each quiz is open for a limited amount of time; quizzes **open on Saturday at 6 AM and close on Sunday at 6 PM.** The purpose of each quiz is to test your knowledge of the information for the topics covered. The format of the test will be multiple choice questions and few short- answer questions. Instructions for each quiz will be given prior to the start of the quiz. Missing a quiz will result in a score of zero, with no make-up.

Exams

Take all exams at the scheduled times and dates (No accommodation will be made for requests to take the exam on a different day).

- The format of the test will be multiple choice questions and few short answers questions.

****Any form or sign of academic dishonesty during an exam will result in a zero for the exam grade.**

Laboratory Procedures

Each lab will provide an experiential education process covering material already introduced in the lecture portion of the class.

1) Lab participation is expected. **No make-up labs (except excused absence).** Each unexcused absence will be penalized **5 points** from lab attendance points (100 pts).

2) In the event of increased incidence and risk of COVID-19 that results in the university moving back to a shelter-in-place mode or so, the course instruction will transition to fully online or hybrid. If hybrid, lab participation is expected in-person by scheduled small groups. Student who cannot make in-person due to illness or other approved reasons will perform the lab activities at home with virtual materials.

3) Students will be given a hand-out describing the concepts and protocols for each specific lab experience through D2L or in class. You **MUST** bring each lab record sheet to the lab as well as wear proper attires. If not, it will be penalized **3 points** in each from lab attendance points (100 pts).

4) **Each lab report will provide evidence** that the student participated in the lab and will be turned in at the end of the semester for the laboratory portion of the grade. If you do not return the lab report by the given time, you will get a zero in each time. **Each lab report MUST be submitted every Tuesday by 11 pm through D2L** (Assessments -> Assignments -> DropBox).

Extra Credit Opportunity

There will be several impromptu activities related to our class or department throughout the semester. If you participate in those activities, you will receive extra credits to the EXAM point total (100 pts) from **bonus homework, participating of research projects, conference/thesis presentation, or/and study halls, etc.**

Late Work

Any late assignments will not be accepted.

Make-Up Work/Tests

No make-up exams/assignments will be given for any personal reasons, except under medical/ family emergency situations/ authorized participation in official school functions.

Attendance

Attendance at class is **compulsory** not optional. Any student whose absence was caused by (1) personal illness (must bring a receipt or note from a doctor), (2) death in the immediate family, or (3) authorized participation in official school functions will be given an opportunity to rectify in a manner acceptable to the professor, any deficiencies which may have resulted from such absence. The professor has the prerogative of determining whether or not a student may rectify deficiencies occasioned by absences for other reasons.

- Only three absences will be permitted without penalty. Each additional absence will lead to a **5 points deduction** of your attendance points (100 pts). More than 12 absences will result in your dismissal from the class with a failing grade.
- Students are expected to be on time (grace period: 3 min) for class and stay till the end of class. We will start promptly. (**3 times late=1 absence**)
- Students with perfect attendance (no absence and tardy) in lecture and lab will be given 1% extra credit to the student's semester total.

Instructor Class Policies

1) Class preparation

- Students are expected to **READ assigned chapters prior to class.** It is assumed that you have read the material, and the instructor will help clarify concepts.
- **Bring/have your textbook and power point materials**
- All class notes will be done by hand, that is, unless there is need and with instructor approval, computers/ laptop/tablet will not be allowed for note taking.
- Students are responsible for **checking announcements and course postings on D2L.** This is how your course instructor will communicate with you. All course grades will be posted on D2L. Any discrepancies should be pointed out to the instructor as soon as possible, before the last day of class.

2) Use of electronic devices

- The use of cell phones, laptop computers, electronic tablets, etc., **is not allowed** during lectures and exams. Surfing the web, checking your email, making Facebook posts, or anything of that nature is strictly prohibited. Any cell phone or other electronic device used during an exam will be considered a violation of the student honor code (i.e., cheating) and will result in a zero for that exam.
- If you bring in cell phones into class turn them to silent mode or vibrate or turn them off. Failure to do (ring a bell or alarming) so the first time will lead to dismissal from the class and an absence. Each additional offense will lead to the **loss of 3% points** to the student's semester point total and instructor will ask to leave. **Put away your cell phones in your bag or pocket before the start of class to avoid penalties.**

3) Respect for instructor and classmates

- If you are talking when class starts and do not stop, instructor will ask you to leave.
- If you have any question about the current topic being covered during class, you may always ask me the question at that time. However, if you have any question about the previous class, you may only ask me about previous material after class or during my office hours. Please refrain from asking about previously covered material right before the beginning of the class.
- There is no savory smell food allowed in the classroom.

4) Any student who takes a class virtually MUST 1) turn on a camera and show your face to class, 2) wear proper attires (no shirtless, no sleep wear), and 3) sit at a desk (no lie down on bed). Failure to do, so the first time will lead to dismissal from the class and an absence. Each additional offense will lead to the loss of 3% points to the student's semester point total and instructor will ask to leave. See appendix "Virtual Classroom Policies"

5) **Our university encourage you to wear your masks and get vaccinated if you are able to.** Navigating your chosen major unvaccinated may pose very tough challenges and we are very limited in our ability to provide alternatives due to the progression policies and limited clinical spaces.

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 go to <http://www.mwsu.edu/student-life/disability>.

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.

Tentative Course Schedule:

This may very well change; *Exam 1-3 dates will be determined by class progress at least one week prior to giving the exam. LR: lab report (Due by every Tuesday), CA: chapter activity (Due by every Wednesday)*

Wk	Date	Lecture topic	Reading /Due	Lab
1	1/10	Lecture introduction & overview		
	1/12	Introduce yourself (hardcopy) Ch0. What is Exercise Physiology?	Ch0	
	1/14	Ch0. What is Exercise Physiology? Lab 0. Orientation (measuring units)	Ch0	0
2	1/17	<i>Martin Luther King's Day-No Class</i>	LR0	
	1/19	Ch1. Structure and Function of Exercising Muscle	Ch1	
	1/21	Ch1. Structure and Function of Exercising Muscle Lab 1. Resting measurements	Ch1 Quiz1	1
3	1/24	Ch1. Structure and Function of Exercising Muscle	Ch1 LR1	
	1/26	Ch1. Structure and Function of Exercising Muscle	Ch1 CA1	
	1/28	Ch1. Structure and Function of Exercising Muscle Lab 2. One Repetition Maximum (1-RM): Intro	Quiz2	2

Wk	Date	Lecture topic	Reading /Due	Lab
4	1/31	Ch1. Structure and Function of Exercising Muscle	Ch2 LR2	
	2/2	Ch3. Neural Control of Exercising Muscle	Ch3 CA2	
	2/4	Ch3. Neural Control of Exercising Muscle Lab 3. Fine motor skill	Ch3 Quiz3	3
5	2/7	Ch3. Neural Control of Exercising Muscle	Ch3 LR3	
	2/9	Ch3. Neural Control of Exercising Muscle	Ch3 CA3	
	2/11	Ch3. Neural Control of Exercising Muscle Lab 4-1. 1.5 mile run test (pre-test)	Ch3 Quiz4	4-1
6	2/14	Ch3. Neural Control of Exercising Muscle	Ch3 LR4-1	
	2/16	EXAM 1: Intro, Ch1 & 3 + Lab (0-3)	Ch2	
	2/18	EXAM Review Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism Lab 5. Anaerobic treadmill test	Ch2	5
7	2/21	Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism	Ch2 LR5	
	2/23	Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism	Ch2 CA4	
	2/25	<TACSM Conference> Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism (Quiz5*: in classroom) Lab 6. Maximal oxygen consumption test (VO ₂ max test)	Quiz5*	6
8	2/28	Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism	Ch2 LR6	
	3/2	Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism	Ch2 CA5	
	3/4	Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism Quiz Bowl Lab: study hall (Q&A)	Ch2	NA
9	3/7	EXAM 2: Ch2 + Lab (4-6)		
	3/9	EXAM Review/Ch15. Body Composition	Ch15	
	3/11	Ch15. Body Composition Lab 7. Body composition: skinfold caliper, BIA	Ch15	7
10	3/14-19	Spring Break-No Class		

Wk	Date	Lecture topic	Reading /Due	Lab
11	3/21	Ch4. Hormonal Control During Exercise	Ch4 LR7	
	3/23	Ch4. Hormonal Control During Exercise	Ch4 CA6	
	3/25	Ch4. Hormonal Control During Exercise Lab 8. Agility and flexibility test, Hand grip strength test	Ch4 Quiz6	8
12	3/28	Ch4. Hormonal Control During Exercise	Ch4 LR8	
	3/30	Ch22. Obesity, Diabetes, and Physical Activity	Ch22 CA7	
	4/1	Ch22. Obesity, Diabetes, and Physical Activity Quiz Bowl (maybe move to next Monday)	Ch22 Quiz7	NA
13	4/4	Ch22. Obesity, Diabetes, and Physical Activity	Ch22	
	4/6	EXAM 3: Ch4, 15, & 22 + Lab (7-8)		
	4/8	EXAM Review Ch6. The Cardiovascular System and Its Control Lab 9. Blood pressure, Maximal heart rate	Ch6	9
14	4/11	Ch6. The Cardiovascular System and Its Control	Ch6 LR9	
	4/13	Ch6. The Cardiovascular System and Its Control (Quiz8*: in classroom)	Ch6 CA8 Quiz8*	
	4/15	Easter Break-No Class		
15	4/18	Ch6. The Cardiovascular System and Its Control	Ch9	
	4/20	Ch6. The Cardiovascular System and Its Control	Ch9 CA9	
	4/22	Ch6. The Cardiovascular System and Its Control Lab 10. Interval training	Ch6 Quiz9	10
16	4/25	Ch9. Principles of Exercise Training	Ch9 LR10	
	4/27	Ch9. Principles of Exercise Training	Ch9 CA10	
	4/29	Ch9. Principles of Exercise Training Lab 4-2. 1.5 mile run test (post-test)	Quiz10	4-2
17	5/2-	EXAM 4: Ch6 & 9 + Lab (9-10)		

Tentative Lab Schedule:

Lab	Measurement	Requirement	Meeting
0	Introduction & Overview: units of measure		Classroom
1	Resting measurements: height, weight, waist and hip circumferences, body mass index (BMI), resting hear rate	Physical activity attire Short, no jeans	Classroom
2	One Repetition Maximum (1-RM)	Physical activity attire	Wellness Center
3	Fine motor skill	Physical activity attire Coins: Four each Penny, Nickel, Dime, Quarter Paper/plastic cup	Classroom or Don Flatt Gym
4-1	1.5 mile run test (pre-test)	Physical activity attire	Wellness Center
5	Anaerobic treadmill test	Physical activity attire	Wellness Center
6	Maximal oxygen consumption test (VO ₂ max test)	Physical activity attire	Wellness Center
7	Body composition: skinfold caliper, BIA	Short sleeves & shorts	Classroom
8	Agility and flexibility test, Hand grip strength test	Physical activity attire	Classroom or Don Flatt Gym
9	Blood pressure, Maximal heart rate	Physical activity attire Short sleeves, no jeans	Classroom
10	Interval training	Physical activity attire	Turf field or Don Flatt Gym
4-2	1.5 mile run test (post-test)	activity attire	Wellness Center