

# Course Syllabus: Intro to Exercise Physiology EXPH 1904-201 Fall 2020, MWF 9-9:50 am (CO223), F 8-8:50 am (Lab, CO111) Department of Athletic Training & Exercise Physiology

# **Contact Information**

Instructor: Soon-Mi Choi, Ph.D. Office: Ligon Hall Room 208 Office phone: (940) 397-4956 E-mail: soonmi.choi@msutexas.edu Office hours: MTWF 10 am-11:30 am/ MWF 1:30 pm-3 pm \*\*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 a <u>hybrid course</u> for Fall 2020. You can attend <u>virtually or in person</u>, with technology tools expanding attendance options while allowing students to engage in the class in <u>real-time</u>. The class will meet in its regularly scheduled room but will utilize social distancing and an assigned seating chart. When the university transitions to fully online after Thanksgiving we will review during the last week of class and hold our finals virtually. I will use D2L for posting syllabi, course communication, course schedule, attendance, and gradebook. There will be some online office hours announced through D2L. 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, the course instruction will transition to fully online. More instructions will be given at that time.

Introduction to 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, 7th edition, Champaign, IL: Human Kinetics.
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 few 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**

Refer to: Student Handbook-2019-20

# **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	10*1%	10
Lab attendance & attitudes		5
Total		100

Table 2: Total percentages for final grade.

Grade	%
А	90-100
В	80-89
С	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-> DropBox, and <u>the answer MUST be</u> <u>submitted every Thursday by 11 pm.</u> There will 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 <u>open on Saturday at 6</u> <u>AM and close on Sunday at 6 PM.</u> 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.

- Preparation (in-person): Scantron form, pencil, and black/blue pen

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

2) Students will be given a hand-out describing the concepts and protocols for each specific lab experience through D2L or in class.

3) **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 Wednesday 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

# 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.

<u>Only three absences will be permitted without penalty.</u> Each additional absence will lead to a **5 points deduction** of your attendance points (100 pts). <u>More than 12 absences</u> 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 <u>perfect attendance (no absence and tardy)</u> 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

<u>All class notes will be done by hand</u>, 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 <u>the first time will lead to</u> <u>dismissal from the class and an absence.</u> 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. <u>Please refrain from asking about previously</u> <u>covered material right before the beginning of the class</u>.

-There is no savory smell food allowed in the classroom (in-person class only).

# 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 <a href="http://www.mwsu.edu/student-life/disability">http://www.mwsu.edu/student-life/disability</a>.

# **College Policies**

Campus Carry Rules/Policies Refer to: <u>Campus Carry Rules and Policies</u>

# 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 designatedsmoking 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 Universitysponsored 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. CA: chapter activity (Due by every Thursday)* 

Wk	Date	Lecture topic	Reading	Lab
1	8/24	Lecture introduction & overview		
-	8/26	What is Exercise Physiology?	Ch0	
	8/28	Ch1. Structure and Function of Exercising Muscle Lab 0. Orientation (measuring units)	Ch1	0
2	8/31	Ch1. Structure and Function of Exercising Muscle	Ch1	
	9/2	Ch1. Structure and Function of Exercising Muscle	Ch1 CA1	
	9/4	Ch1. Structure and Function of Exercising Muscle	Ch1 Quiz1	1
3	9/7	Labor Day-No Class		
	9/19	Ch1. Structure and Function of Exercising Muscle	Ch1 CA2	
	9/11	Ch1. Structure and Function of Exercising Muscle	Ch1 Quiz2	2
4	9/14	Ch3. Neural Control of Exercising Muscle	Ch3	
	9/16	Ch3. Neural Control of Exercising Muscle	Ch3 CA3	
	9/18	Ch3. Neural Control of Exercising Muscle	Ch3 Quiz3	3
5	9/21	Ch3. Neural Control of Exercising Muscle	Ch3	
	9/23	Ch3. Neural Control of Exercising Muscle	Ch3 CA4	
	9/25	Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism	Ch2	4-1
6	9/28	EXAM 1: Intro, Ch1 & 3 + Lab (0-3)		
	9/30	EXAM Review/ Ch2. Fuel for Exercise: Bioenergetics and Muscle Metabolism	Ch2	

Wk	Date	Lecture topic	Reading	Lab
	10/2	Ch2. Fuel for Exercise: Bioenergetics and	Ch2	5
		Muscle Metabolism	Quiz4	
7	10/5	Ch2. Fuel for Exercise: Bioenergetics and	Ch2	
		Muscle Metabolism		
	10/7	Ch2. Fuel for Exercise: Bioenergetics and	Ch2	
		Muscle Metabolism	CA5	
	10/9	Ch2. Fuel for Exercise: Bioenergetics and	Ch2	6
		Muscle Metabolism	Quiz5	
8	10/12	Ch2. Fuel for Exercise: Bioenergetics and	Ch2	
		Muscle Metabolism		
	10/14			
	10/16	The 1st IOHSK International Annual		NA
		Conference: <u>https://www.iohsk.org/2020-</u>		
-		<u>conference</u>		
9	10/19	EXAM Review/ Ch4. Hormonal Control During	Ch4	
		Exercise		
	10/21	Ch4 Harmanal Control During Eversion	Ch 4	
	10/21	Ch4. Hormonal Control During Exercise	Ch4	
	10/23	Ch4. Hormonal Control During Exercise	CA6 Ch4	7
	10/25	Ch15. Body Composition (Lab)	Ch15	/
		Chi S. Dody Composition (Lab)	Quiz6	
10	10/26	Ch4. Hormonal Control During Exercise	Ch4	
10	10/20	chi. Hormonal control Daring Excreise	CIT	
	10/28	Ch4. Hormonal Control During Exercise	Ch4	
	20,20		CA7	
	10/30	Ch22. Obesity and Diabetes	Ch22	8
	,		Quiz7	-
11	11/2	Ch22. Obesity and Diabetes	Ch22	
	11/4	Ch22. Obesity and Diabetes	Ch22	
	-		CA8	
	11/6	Ch22. Obesity and Diabetes	Ch22	9
12	11/9	EXAM 3: Ch4, 15, & 22 + Lab (7-8)		
	11/11	EXAM Review/ Ch6. The Cardiovascular	Ch6	
		System and Its Control		
	11/13	Ch6. The Cardiovascular System and Its	Ch6	10
		Control	Quiz8	
13	11/16	Ch6. The Cardiovascular System and Its	Ch6	
		Control		
	11/1	Ch6. The Cardiovascular System and Its	Ch6	
		Control	CA9	
	11/20	Ch6. The Cardiovascular System and Its	Ch6	4-2
		Control	Quiz9	

Wk	Date	Lecture topic	Reading	Lab
14	11/23	Ch6. The Cardiovascular System and Its	Ch6	
		Control		
	11/25	Thanksgiving Holidays-No Classes		
	-27			
15	11/30	Fully Online	Ch9	
		Ch9. Principles of Exercise Training		
	12/2	Ch9. Principles of Exercise Training	Ch9	
			CA10	
	12/4	Ch9. Principles of Exercise Training	Ch9	NA
			Quiz10	
16	12/9-	EXAM 4: Ch6 & 9 + Lab (9-10)		

# **Tentative Lab Schedule:**

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