

# THE UNIVERSITY OF TEXAS AT EL PASO COLLEGE OF HEALTH SCIENCES KINESIOLOGY DEPARTMENT



# KIN 4312 EXERCISE PHYSIOLOGY Fall 2020

- Instructor: Kisuk Min, Ph.D.
- Office: HSSN 452
- Phone: 915-747-8228
- Email: kmin@utep.edu
- Office hours: Email to make an appointment
- Lab instructors Brittaney Russ (brruss@utep.edu) CRN: 14408 and 11587
  Victor Gonzalez (vmgonzalez7@miners.utep.edu) CRN: 11797, 11798, and 13002
  Uriel Cabanillas (uecabanillas@miners.utep.edu) CRN: 11524 and 11525

## **COURSE PREREQUISITES**

BIOL 2311/2111, BIOL 2313/2113, HSCI 2302 and KIN3303

### **REQUIRED TEXTS**

- Lecture: Exercise Physiology Powers, S.K., Howley, E.T. and John Quindry 11<sup>th</sup> Edition. New York, NY: McGraw Hill.
- Laboratory Manual available to be printed on Blackboard

### **CLASSES**

- Lecture: CRN 3415
- Laboratory: CRN 34316 & 34317

### **COURSE DESCRIPTION**

This course has been designed to provide the student with an overview of exercise physiology. Exercise physiology is a specialization within the field of kinesiology. Exercise physiology is the study of how cells, tissues, organs and organ systems respond to exercise and other physical activity. We will discuss the effect of acute and chronic exercise on the improvement of health and wellness. This course contains a laboratory section where the student will be given the opportunity to experience a practical application of the topics discussed in class.

**<u>GENERAL COURSE OBJECTIVES</u>**: By the end of this course, students should be able to understand:

- Basic physiological principles of the major organ systems in the body
- Physiological adaptations to exercise
- Physiological metabolic processes during exercise
- Role of exercise in the prevention and/or treatment of chronic diseases

**EVALUATION:** Each student's grade will be based on the following:

350 Points (35%)
150 Points (15%)
200 Points (20%)
700 Points (70%)
150 Points (15%)
100 Points (10%)
50 Points (5%)
300 Points (30%)
1.000 Points

**<u>GRADING</u>**: Grades will be assigned according to your total points.

Grading Scale					
A =	900 – 1000				
B =	800 – 899.9				
C =	700 – 799.9				
D =	600 - 699.9				
F =	<600				

### COURSE REQUIREMENTS AND POLICIES

- Students are required to check Blackboard and emails for the announcements on a daily basis. Students must use their UTEP email.
- Students can request the make-up exam and quiz by providing verification for unusual circumstances. The instructor and students will set up a date and time for the make-up exam and quiz.
- Students must complete and submit all assignments on time. Article summaries that are not turned in on time will receive a 50% deduction. In the lab section, late submissions will not be accepted after the due date of the report.
- Review of exam, quiz, article summary and lab assignment is allowed within a week from the grade posted. *The exam, quiz, article summary and lab assignment cannot be reviewed at the end of the semester* or after finalized grades.
- Any attempt to record the test or quiz questions is *strictly prohibited*. Any student(s) suspected of copying, recording, or photographing these materials will be immediately reported to the Dean of Students. *No questions asked*.
- Lecture slides were developed by Dr. Min for KIN4312 lectures only. *The lecture slides must not be copied, quoted or cited by others for other purposes.*

### EXAM AND QUIZ

- All exams will be completed individually by the student through **Blackboard using Respondus Lockdown Browser and Monitor. A webcam should be used during exams and quizzes.** Each student must download Respondus Lockdown Browser and Monitor via Blackboard. Exams will cover information presented in lectures and class discussions. Students should study and review chapters and lectures thoroughly. Exams will only cover the materials for the corresponding module.
- A total of 10 quizzes will be given during the semester for the lecture portion of this class. The quizzes will cover information given from previous lectures. Lecture quizzes will be completed individually by the student through Blackboard using Respondus Lockdown Browser and Monitor.
- Please see the links below for Respondus Lockdown Browser and Monitor. https://www.utep.edu/technologysupport/\_Files/docs/MM\_Respondus-Student.pdf https://www.youtube.com/watch?v=bF27uqRWiJA&feature=youtu.be&t=2m39s
- If you have technical problems for Respondus Lockdown Browser and Monitor, please contact HELP desk
- Exams and quizzes will be released within a 12-hour window from 8 am to 8 pm. Students will have only one attempt for 30 minutes for each quiz and 90 minutes for each exam.

### ARTICLE SUMMARY

Students have to submit six article summaries during the semester. Students will be given six articles associated with some of chapters in this course. Students are expected to summarize articles in your own words (copy-paste from the article is not acceptable). Each paper (no more than 2 pages) should be typed, be double spaced using 1" margins with a 12 pt-Times New Roman font. Article summaries will be electronically submitted to student's lab instructor via blackboard in a <u>PDF format</u> until due date. The article summary must include Introduction, Methods, Results, Conclusions, and Keywords. The article summaries are due midnight before the last day of each module.

#### Due date:

- Article summaries in Module 1: October 4<sup>th</sup>
- Article summaries in Module 2: November 1<sup>st</sup>
- Articles summaries in Module 3: November 30<sup>th</sup>

### EXTRA CREDIT

If students need extra credit, the students can submit one additional article summary <u>by November 1<sup>st</sup></u>. The article will be uploaded on Blackboard. Article summaries will be electronically submitted to the lecture instructor via blackboard in a <u>PDF format</u> until due date. <u>The extra credit will be given 20 points</u>.

#### LECTURE SLIDES

Pre-recorded lecture slides will be uploaded on Blackboard every Monday. Students can download the lecture slides.

#### SCHOLASTIC HONESTY AND DISCIPLINE

Students are encouraged to study together and to share their knowledge freely during the learning process. However, during exams and quizzes no assistance from other students or outside sources is allowed (materials such as books and notes may not be used). Students should handle their answers discretely by keeping them out of easy view of others. Students may discuss individual written assignments (i.e. lab reports, article reviews, etc.) but these assignments must be the student's own work. "Scholastic dishonesty-which includes the attempt of any student to present the work of another as his or her own, or any work

which s(he) has not honestly performed, or attempting to pass any examination by improper means--is a serious offense and will subject the student to disciplinary action. The aiding and abetting of a student in any dishonesty is held to be an equally serious offense. All alleged acts of scholastic dishonesty will be reported to the Dean of Students for disposition. It is the Dean of Students' responsibility to investigate each allegation, dismiss the allegation, or proceed with disciplinary action in a manner which provides the accused student his or her rights of due process.

### SPECIAL SERVICES

UTEP and the Department of Kinesiology seek to provide reasonable accommodations for all qualified individuals who need accommodations or support for their learning. UTEP adheres to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required, affording equal educational opportunity. It is the student's responsibility to register with the **Center for Accommodations and Support Services** (CASS) (http://sa.utep.edu/cass/), located in the UTEP Union Bldg. East Wing, Room 106, and inform the faculty member to arrange for appropriate accommodations or support.

# TENTATIVE COURSE SCHEDULE

Module	Week	Торіс	Chapter
	8/24	Introduction	
		Common Measurement in Exercise	1
	0/21	Laboratory Assessment of Human Performance	20
	0/31	Exercise Prescriptions for Health and Fitness	16
	9/7	Temperature Regulation	12
Modulo 1	0/4.4	Exercise and Environment	24
module i	9/14	Nutrition and Body Composition for Health	18
	0/04	Nutrition, Body Composition and Performance	23
	9/21	Exercise for Special Population	17
	9/28	Ergogenic Aids	25
		Factors Affecting Performance	19
	10/5	Exam 1 on October 5	
	10/5	Circulatory Response to Exercise (part 1)	9
	10/12	Circulatory Response to Exercise (part 2)	9
		Respiration During Exercise (part 1)	10
Modulo 2	10/19	Respiration During Exercise (part 2)	10
		Physiology of Training (part 1)	13
	10/26	Physiology of Training (part 2)	13
		Acid-Base Balance	11
	11/0	Exam 2 on November 2	
	11/2	Nervous System	7
	11/9	Cell Signaling & Hormonal Response (part1)	5
		Cell Signaling & Hormonal Response (part 2)	5
	11/16	Bioenergetics (part 1)	3
Module 3		Bioenergetics (part 2)	3
Wodule 5	11/23	Exercise Metabolism	4
		Skeletal Muscle Structure & Function	8
	11/30	Immune System & Control of Internal Environment	6,2
	11/50	Preventing Chronic Disease	14
	12/7	Exam 3	

### QUIZZ SCHEDULE

Module	Date	Chapter
Module 1	9/4	1 & 20
	9/11	16 & 12
	9/18	24 & 18
	9/25	23 & 17
Module 2	10/16	9
	10/23	10
Module 3	11/6	7
	11/13	5
	11/20	3
	11/27	4 & 8