

# KINE 3080: Physiological Basis of Exercise & Sport

BK McFarlin, PhD, FACSM, FTOS



**MTWTh 2:00-3:50**  
**Room: PEB 216**

---

## **Instructor:**

Dr. B. McFarlin, Assistant Professor  
Office Hours by Appointment  
Use Blackboard e-mail

## **Teaching Assistant:**

Eric Prado  
Eric.prado@unt.edu

## **Peer-Mentors:**

Adam Venable, Andie Henning, Eric Prado, and Jill Sampson

## **Prerequisites (recommended):**

Junior Standing; 6 hrs of BIOLOGY or equivalent

## **Text:**

"Physiology of Sport and Exercise", 5<sup>th</sup> Edition. Jack H. Wilmore & David L. Costill. Human Kinetics.  
[www.humankinetics.com/physiologyofsportandexercise/osg](http://www.humankinetics.com/physiologyofsportandexercise/osg).

## **Course Description:**

The changes in physiological functions resulting from physical activity

## **Course Objectives:**

This course is offered in a hybrid format, which is different than a traditional class. You will be expected to prepare for in-class lectures using lectures and other information available on Blackboard. Upon successful completion of this course, students will:

1. Demonstrate knowledge in the area of the physiological response to acute and chronic exercise.
2. Demonstrate an understanding of the mechanism(s) by which disease, physical age, and nutritional interventions modify physiological responses to exercise.

## **Course Expectations:**

1. **Lecture Attendance:**
  - a. **If you miss more than 2 days of class**, Dr. McFarlin reserves the right to drop you from the course without notice.
2. If you have special learning needs, please inform me immediately.
3. Please respect others in class by leaving you cell phones/pagers, etc turned off. Phone calls are not to be taken at any time during class.
4. Participate in weekly peer-mentoring activities with your assigned group.
5. If at any point during the semester you are unhappy with your performance in this class, please contact me **immediately**.
6. **Academic dishonesty** will not be tolerated (i.e., copying, plagiarism, cheating, using cell phone during exam, etc.); individuals found violating this policy will be reported to the KHPR department

chair. Any individual who commits academic dishonesty at any point during the semester will receive a zero for the assignment in question.

**ADA Statement:**

When possible, and in accordance with 504/ADA guidelines, we will attempt to provide reasonable academic accommodations to students who request and require them. Please call the UNT Office of Disability Accommodation (<http://disability.unt.edu/about>) for more details.

**Academic Dishonesty Policy (copying, plagiarism, cheating) per UNT Policy 18.1.6:**

Students are expected to conduct themselves in a manner consistent with the University's status as an institution of higher education. In the class setting, students shall follow their instructors' directions and observe all academic standards and requirements published in course syllabi and other course materials. A student is responsible for responding to an academic dishonesty report issued by an instructor or other University authority. If a student fails to respond after proper attempt at notification, the University may take appropriate academic actions in the absence of the student.

Any student found to be in violation of the academic dishonesty policy will be given a grade of zero for the assignment in question and reported to the UNT administration through the reporting mechanism approved in UNT policy 18.1.6 (Office of Academic Integrity).

**Evaluation:**

Final grades will be determined based on the total number of points that you accumulate during the semester.

<b>Component</b>	<b>Points</b>
Peer-Mentoring Participation (10 sessions, 5 pts/session)	50
Peer-Mentoring Presentations	50
Exam I	90
Exam II	120
Exam III (Final Exam)	150
<b>Total</b>	<b>410</b>

**Grade Scale:** A (>369), B (368-328), C (327-287), D (286-246), F (<205)

**Note:** Students will not be allowed to take an Incomplete in this course due to poor planning on their part. If you find you do have a legitimate reason for an Incomplete, please talk with me as soon as possible to discuss the situation and to identify the documentation that will be required to support your request. Please consult the UNT catalog to review conditions under which an incomplete may be granted.

**Peer-Mentoring Activities:**

You will be assigned to a peer-mentoring group that will be lead by one of the graduate student peer-mentors. You will be expected to participate in twice weekly mentoring sessions that will be held on Blackboard between 7 and 11 pm in the evening. Your peer-mentor will contact your group to arrange a time that best meets each student's schedule. At a minimum during peer-mentoring sessions, your group will review a current research article in exercise physiology and discuss a practical implication of the core concepts for the week. Your peer-mentor may also discuss career options with you related to exercise physiology. You should take advantage of the opportunity to learn from your peer-mentor, who recently earned an undergraduate degree in exercise physiology.

**Peer-Mentoring Presentations:**

Based on your mentoring participation, you will be asked to select a research article from a list of articles provided by your peer-mentor for presentation at the end of the semester. From this article you will be asked to prepare a poster that summarizes the key aspects of the articles (a PowerPoint template will be

provided for you). You will be allowed to work individually or in groups of two. Your PowerPoint file must be turned into your peer-mentor by June 23<sup>rd</sup> for it to be printed. Your posters will be hung in a TBD location of the PEB for presentation during your class meeting time on June 24<sup>th</sup> and 25<sup>th</sup>. More details on the presentation will be provided by Dr. McFarlin at a later date.

### **Outline for In-class Lectures:**

An outline of the slides to be presented during the in-class lectures will be available for download in a PDF format on Blackboard within 24-h of the lecture date. Please note that complete slides will not be available, so you will need to attend class in order to complete them. Additional information from the in-class lectures may be provided at the discretion of the instructor on a class-by-class basis.

### **Lecture Audio Recordings:**

The instructor will record all lecture audio in an MP3 format and make it available for download from Blackboard home page.

### **Examination Review Sheets:**

A basic review sheet listing all the topics to be covered on the exam will be available prior to the exam for download on Blackboard.

### **Examinations:**

Exam I will cover the topics 1-3 (Bioenergetics, Exercise Metabolism, and Exercise Endocrinology) and Exam II will cover topics 4-6 (Muscle Physiology, Neuromuscular adaptations to resistance training, and Metabolic adaptations to aerobic training). Exam III (Final Exam) will cover topics 1-6 (all topics in the course). You will need to **bring your UNT Student ID** to the exams for ID verification when turning in your exam. Once the scantrons have been analyzed, your grade will be posted on Blackboard, scantron forms will be available for pickup outside of class. Do not throw away your scantrons, as they are the only proof of your exam grades, in the event that you need to contest your grades. **Please be in class to take examinations. If you are late or do not show up, NO make-up exam will be offered.**

### **How do I get answers to my Questions?**

Dr. McFarlin is here to help you achieve success in this class. Unfortunately it is very difficult from a time perspective for me to reply to individual e-mail questions about course content. Also, there is a good chance that several of your classmates may have a similar question as you. Thus, if you have a question concerning lecture material, please post these in the discussion forum on Blackboard. This will allow all students in the course to view my responses. If you prefer to ask a question in person, feel free to ask Dr. McFarlin after class or schedule an appointment to meet him in his office. If you have a grade related question, you are welcome to e-mail Dr. McFarlin directly via Blackboard e-mail.

### **Summer Tutoring Support:**

This summer you will have access to tutors that can assist you with a better understanding of the course content. The tutors will be available to answer your questions a variety of hours during the semester. Some of hours will be online through Blackboard, while others will be face-to-face in the department's tutoring center.

**Tentative Order of Topics (Related to Exams):**

<b>Topic</b>	<b>Online Date</b>	<b>In-class Date</b>	<b>Pages in Book</b>
Syllabus	6/2	6/3	N/A
Bioenergetics	6/2	6/3 – 6/4	46-78
Exercise Metabolism	6/4	6/6	98-121
Exercise Endocrinology	6/9	6/10	59-77
Exam I Question Session**	TBD, Blackboard	----	N/A
<b>Exam I</b>		<b>6/12</b>	<b>Topics 1-3</b>
Muscle Physiology	6/16	6/17	24-45
Neuromuscular Adaptations to Resistance Training	6/17	6/18	202-219
Metabolic and Muscular Adaptations to Exercise	----	6/19	186-201
Exam II Question Session**	TBD, Blackboard	-----	N/A
<b>Exam II</b>		<b>6/23</b>	<b>Topics 4-6</b>
Exam III Question Session**	TBD, Blackboard	6/24	N/A
Mentoring Poster Due	6/23	-----	N/A
Mentoring Poster Presentation	-----	6/24 & 6/25	N/A
<b>Exam III</b>		<b>7/3</b>	<b>All Topics</b>

\* This is an approximate date that this lecture component will be started

\*\* These lectures will be given on Blackboard

**Online Exam Question Sessions:** I will announce when these will be held a few days before they are to occur. These sessions will be held in Blackboard.

**Note:** The following information is designed to help the class run smoothly. The instructor reserves the right to make additions and adjustments as necessary. Some of the writings, lectures, films, or presentations in this course may include material that conflicts with the core beliefs of some students. Please review the syllabus carefully to see if the course is one that you are committed to taking. If you have a concern, please discuss it with me at your earliest convenience.