

## ***Graded Exercise Testing and Exercise Prescription***

KSS 5640

Eastern Illinois University

***Kinesiology & Sports Studies***

***Fall 2016***



**Instructor:** **Brian Pritschet, Ph.D.**  
Professor

**Office Hours:** **Monday 9-10 am, Tuesday 1-2 pm, Wednesday 9-10am & 4-5 pm & Friday 10-11 am**  
***Other times by appointment***

**Office:** **2207 Lantz Building** Phone: 581-2215 (KSS office)

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**Course Description:** This course is designed to examine the theoretical and practical aspects of cardiovascular testing devices and their protocols. In addition, classic techniques in exercise prescription will be investigated and implemented in real life situations. Credits: 3

**Course Objective:** To prepare the graduate student to conduct pre-exercise assessments and perform graded exercise testing of asymptomatic and symptomatic individuals in the fitness and clinical environments; to provide an understanding of the basic pathophysiology causing an impaired exercise response and tolerance; to understand the basis for developing an individualized exercise prescription for the apparently healthy individual and special populations. To develop critical thinking and gain experience related to the application of exercise physiology principles to the evaluation of exercise performance and prescription.

**Course Content:**

- Cardiopulmonary & Metabolic pathophysiology**
- Pre-exercise screening and Risk factor assessment/stratification**
- Indications and Contraindications for Exercise Testing/Screening**
- Exercise Testing Modalities**
- Exercise Testing Procedures and Protocols**
- Emergency Procedures**
- Ethics in the Medical Environment**
- Common Medical Terminology**
- Interpretation of the Exercise Response**
- Components of the Exercise Prescription**
- Exercise Prescription for the Apparently Healthy**
- Exercise Prescription for Special Populations**
- Other topics as time allows**

<b>Evaluation:</b>	<b>Midterm Exam</b>	<b>50 points</b>
	<b>Final Exam</b>	<b>60 points</b>
	<b>Quizzes</b>	<b>5-12 points each</b>
	<b>Class Assignments</b>	<b>5-15 points each</b>
	<b>Laboratory Assignments</b>	<b>~10-20 points each</b>
	<b>Project</b>	<b>80 points</b>

**Grading Scale:**A=  $\geq 90\%$  of total points

B=80-89%

C=70-79%

D=60-69

F=&lt;60%

**Text:**[ACSM's Guidelines for Exercise Testing & Prescription](#)

All class assignments must be turned in on the announced due date by the end of the designated class period unless you can provide an official University recognized excuse. [A penalty will be assessed for work that is late (50%), late assignments will not be accepted after 1 day past the due date.] No make-up exams, quizzes, or assignments will be given without appropriate documentation.

The instructor's role is to help you learn and understand the course material. However, this requires you to take an active part, including asking questions during class and consulting with the instructor outside of class to clarify the things that you don't clearly understand.

**Quizzes**

Quizzes will be given ~ biweekly. These quizzes will include multiple choice &/or short answer questions related to the material presented since the previous exam/quiz.

**Midterm & Final Exam** These exams may include multiple choice and short answer questions and "case study" problems. The midterm exam covers the material up to that point while the final exam includes material since the midterm as well as a comprehensive portion. The midterm exam will be completed in the classroom while the final exam will be provided on-line due to the nature of the exam and the need for reference material to complete some of the problems

**Final Exam due date:** *Wednesday – December 14<sup>th</sup> – 10:15 am*

**Class Assignments**

Class assignments may include (but are not limited to) article summaries, clinical problems and/or case studies.

Article Summaries – A summary of a research article (*written or oral*) devoted to a specific topic.

Clinical Problems & Issues – Students will answer questions posed in class using the research literature and other sources in addition to the textbook

Case Studies – Calculations and interpretation of patient/client data and development of exercise prescriptions

**Lab Assignments**

Students are expected to gain practical experience in the administration of exercise evaluations. Small groups will be formed and expected to conduct graded exercise tests within their group outside of the scheduled class time. In most cases, students from within each group will serve as the 'subject' for the exercise test. If you have any health problems or other issues that would prevent you from completing an exercise test to maximum tolerance, you **must** let the instructor know during the first week of class.

**Project**

Choice of working individually or in groups of 2-3, students will investigate and present to the class an overview of exercise prescription principles for specific special populations.

**Participation**

As graduate students, it is assumed and expected that you are interested in the content of this course, therefore; ALL students are expected to attend class and to participate in class/laboratory activities and discussions with interest and enthusiasm.

## Professionalism

Situations may arise in this course while performing testing procedures and gathering screening information in which personal information is collected. **Students are expected to act in a professional manner at all times, treating their classmates with respect and maintaining confidentiality.**

**Please turn phones and music players Off and remove earpieces prior to the start of class and leave them in your pocket or backpacks.**

**There should be no texting during Class or in the Laboratory!**

**The use of a laptop computer or tablet device to view or take notes is permissible- but discouraged, however, please do not use for anything other than class related functions (ø facebook, games, twitter, browsing, etc.).**

***Individuals who habitually violate these guidelines will be asked to leave the classroom and will need to meet with the instructor prior to being allowed to return.***

**It is expected that all students will follow the guidelines set forth in the EIU Student Conduct Code (<http://www.eiu.edu/judicial/studentconductcode.php>). Violations will be reported to the Office of Student Standards. Academic honesty is expected, cheating in any form (including plagiarism) will not be tolerated! This includes work assigned through D2L! Work submitted via D2L should be completed independently unless otherwise indicated by the instructor.**

***The information contained in this syllabus is subject to change at the discretion of the instructor***

- ❖ Students who are having difficulty achieving their academic goals are encouraged to contact the Student Success Center for assistance with time management, test taking, avoiding procrastination, setting goals and other skills to support academic achievement ([www.eiu.edu/~success](http://www.eiu.edu/~success)). The Student Success Center provides individualized consultations. To make an appointment, go to 9th Street Hall, Room 1302 or call 581-6696.
- ❖ If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006 or call 217-581-6583 to make an appointment.

## Tentative Schedule

WEEK	Topic	Approximate Quiz & Exam Schedule
1	Course Introduction & Exercise Physiology Review	
2	Review cont. & Health Screening	Quiz
3	Health screening & Risk Assessment & Stratification	
4	Pre-Exercise Evaluation, Functioning in a Medical Environment, Common Medical Terminology, Emergency Procedures	Quiz
5	Assessment of Cardiorespiratory Fitness & Function	
6	Clinical Exercise Testing	Quiz
7	Clinical Exercise Testing cont.	
8	Clinical Exercise Testing cont.	Midterm Exam
9	Clinical Exercise Testing cont.	
10	Interpretation of Exercise Response	Quiz
11	Interpretation of Exercise Response cont.	
12	Interpretation of Exercise Response cont.	Quiz
13	Exercise Prescription	
14	Exercise Prescription	Quiz
15	Exercise Prescription	
16	Final Case Study Due	December 14 <sup>th</sup> 10:15 am