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**Annette Caldwell Simmons School of
Education and Human Development**
Applied Physiology and Wellness
Southern Methodist University

APSM 3311: EXERCISE PHYSIOLOGY COURSE SYLLABUS SPRING 2012

COURSE DESCRIPTION

This course examines the human body's responses and adaptations to exercise and movement. A systemic approach is employed to identify the adaptations of specific organ systems to exercise and exercise training. Additional topics include the how adaptations to exercise are altered under various conditions including: environment, fluid balance, and the use of ergogenic aids. This course will also examine the testing procedures commonly used to measure exercise performance and training status.

COURSE FOCUS

This course is designed to examine the physiological adaptations to exercise and exercise training. These relationships will be examined in a variety of applied topics such as environmental conditions, fluid balance, ergogenic aids, nutritional support and aerobic and strength training.

GENERAL COURSE INFORMATION

Prerequisites: APSM 2310
Credit: 3 semester hours
Days, time, place: Mon & Wed 2-3:20
Simmons Hall: Room 144
Office hours: Tues 9:00a – 10:30a, Wed 12:00p – 1:30p, or by appointment

Course Tutor: Ms. Kelyn Rola, Email: krola@smu.edu, Office Phone: (214) 768-1025

REQUIRED TEXTBOOK

Kraemer, William J; Fleck, Steven J; Deschenes, Michael R. *Exercise Physiology: Integrating Theory and Application* 1st edition, 2012. Published by Lippincott Williams & Wilkins.
ISBN-13: 978-0-7817-8351-4

Additional required material may be provided in class and online to accompany specific lectures. Students are responsible for obtaining this information. This information will be found on the examinations.

LEARNING OBJECTIVES

After completing this course, the successful student should be able to

1. Describe the physiological adaptations to exercise observed in the following systems: skeletal muscle, nervous system, cardiovascular system, respiratory system, endocrine system.
2. Identify the effects of the following on exercise training: nutritional status, fluid balance, environment, ergogenic aids
3. Understand the exercise fitness tests used to determine exercise performance and training status.
4. Understand why sports policy has adapted various regulations that may unfairly augment exercise performance and training status.

GRADING:	Exams (3 @ 100 pts ea)	300 points
	Participation	20 points
	Quizzes (6 @ 5 pts ea)	30 points
	Homework	50 points
	Comprehensive Final Exam	<u>150 points</u>
	Total points available	550 points

Grades based on total points from 550 possible points.

94-100 (514-550 points) = A	74-76% (404-420 points)	= C
90-93% (492-513 points) = A-	70-73% (382-403 points)	= C-
87-89% (476-491 points) = B+	67-69% (366-381 points)	= D+
84-86% (459-475 points) = B	64-66% (349-365 points)	= D
80-83% (437-458 points) = B-	60-63% (327-348 points)	= D-
77-79% (421-436 points) = C+	< 60% (< 326 points)	= F

Your grade will be determined numerically as indicated above.

EXAMINATIONS

There are three semester exams that will be issued during the regular lecture period. These exams will only cover material presented after the previous exam. There will be a final exam issued during the university scheduled exam period. The final examination will be cumulative and will contain information provided throughout the semester. Lecture exams may consist of questions of several types including true/false, multiple choice (single or multiple answer), fill-in-blanks, short answer, and essay.

TARDINESS DURING EXAMS:

If a student is tardy to class during an exam, they must arrive BEFORE the first exam is completed and turned in by another class member. Any tardy student who arrives after an exam has been turned in may discuss taking an essay format make-up exam.

MAKE-UP EXAMS

Make-up exams may be scheduled if notice of an absence is given prior to the examination time. The instructor reserves the right to require documentation verifying the reason for an absence (ex: doctors note). Make-up exams must be scheduled prior to the next lecture time. There are no make-up quizzes.

ATTENDANCE POLICY:

It is the responsibility of each student to attend each lecture session for this course and to obtain and understand the material presented. The participation grade for this course is based on attendance to each lecture session. In the event of an absence due to a University sponsored activity or an officially authorized absence the participation grade for that lecture will be waived. However, students attending a university sponsored activity remain fully responsible for obtaining and learning the material. The lectures will be coordinated with the assigned readings. The text readings will provide students with a supplementary approach and perspective to the material. However, lectures will include information that is not covered within the text. Lecture packets will be available on Blackboard following each lecture.

COURSE POLICIES:

Professionalism:

Students are expected to arrive on time on lecture and laboratory days. Students are expected to be respectful and attentive during lectures offered by the instructor, visiting scientists, guest lecturers, or whoever may be leading a session. At all times, students are expected to act in a manner that does not interfere with the ability of the instructor to teach or fellow students to learn. Students are expected to be respectful and courteous to the instructor and fellow students.

Cell phones, PDAs, laptops and other communication devices are to remain silenced and stowed throughout the lecture and laboratory sessions. Texting and/or emailing in class are not permitted. During course meeting times, students should not be texting, studying material unrelated to Exercise Physiology, reading the newspaper, etc.

Students are responsible for checking SMU e-mail on a daily basis for messages from the university or from instructor or teaching assistant.

Due dates:

All assignments must be turned in at the beginning of class on the date listed in the syllabus. The score of a late assignment will be reduced by 10% per business day. Absence from class does not constitute notification of a late assignment. If an absence is unavoidable, the student is responsible for providing the assignment to the instructor on time. Computer/printer failures are not acceptable reasons for late assignments.

Quality of Work:

All written work must be printed legibly or typed. All logic and problem-solving steps must be shown for full credit.

Perceived grading errors:

Write down the question number and the text reference that validates your answer.

Bring that information to the instructor for review.

The instructor will adjust scores if a scoring error was made.

If the student is incorrect, the instructor will help the student relearn the material in question.

ACCOMMODATIONS

Disability Accommodations: Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for accommodations. Students may call 214-768-1470 or visit <http://www.smu.edu/alec/dass> to begin the process. Once registered students should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue)

COURSE SCHEDULE

COMPREHENSIVE FINAL EXAM – Check for date and time

This syllabus is a tentative schedule. Dates and material are subject to change.

Date	Topic	Reading
1-18	What is Exercise Physiology?	
1-23	Bioenergetics & Energy Demands	Chapter 2
1-25	Bioenergetics & Energy Demands	
1-30	Skeletal Muscle System	Chapter 3
2-1	Skeletal Muscle System	
2-6	The Nervous System	Chapter 4
2-8	The Nervous System	
2-13	Exam I	
2-15	Cardiovascular System	Chapter 5
2-20	Cardiovascular System	
2-22	Respiratory System	Chapter 6
2-27	Respiratory System	
2-29	Endocrine System	Chapter 7
3-5	Endocrine System	
3-7	Exam II	
3-12	Spring Break	
3-14	Spring Break	
3-19	Nutrition and Exercise	Chapter 8
3-21	Nutrition and Exercise	
3-26	Fluid and Electrolyte Changes	Chapter 9
3-28	Fluid and Electrolyte Changes	
4-2	Exercise Testing for Predicting Performance	Chapter 15
4-4	Exercise Testing for Predicting Performance	
4-9	Exam III	
4-11	Understanding Body Composition	Chapter 11
4-16	Understanding Body Composition	
4-18	Environment & Exercise	Chapter 10
4-23	No Class	
4-25	Environment & Exercise	
4-30	Review for Final Exam	
	Final Examination	