Spring, 2014 M. G. Fischman

## KINE 4760 - INTRODUCTION TO EXERCISE SCIENCE RESEARCH (3 cr.)

Lecture: Tues & Thur, 8:00 - 9:15 AM (HC 1435)

#### **Instructor**

Dr. Mark G. Fischman, Motor Behavior Center, 1459 Haley, 844-1465. E-mail: fischmg@auburn.edu

Office hours: Mon & Wed, 9-10:30 AM; Tue & Thu, 3-4 PM. Other times by appointment.

### **Course Description**

Introduction to research literature, experimental design, and research interpretation in the exercise science sub–disciplines of biomechanics, exercise physiology, and motor behavior.

# **Required Textbook**

Baumgartner, T. A., & Hensley, L. D. (2013). *Conducting & reading research in kinesiology* (5<sup>th</sup> Ed.). McGraw-Hill.

### **Course Objectives**

Upon completion of this course, students will understand:

- 1. How to read and interpret research reports effectively (i.e., being intelligent "consumers" of research);
- 2. How research is a way of obtaining knowledge in exercise science;
- 3. The departmental and university resources available for conducting research in exercise science;
- 4. How to identify a suitable research topic that can be used to develop a senior research paper in exercise science.

#### **Evaluation and Grading**

Three exams and one comprehensive final examination will be given in this course. Exams and the final are based on assigned textbook readings and lecture notes. Exams 1, 2, and 3 are short-answer, brief discussion questions; the final exam contains 90 multiple-choice questions.

Component			Final Letter Grade
Exam #1	-	20%	90.0 - 100 = A
Exam #2	-	20%	80.0 - 89.9 = B
Exam #3	-	20%	70.0 - 79.9 = C
Final Exam	-	40%	60.0 - 69.9 = D
			Under $60.0 = F$

### **Class Policy Statements**

Auburn University's General Counsel maintains a single website that serves as the collection of all University Policies: <a href="https://sites.auburn.edu/admin/universitypolicies/default.aspx">https://sites.auburn.edu/admin/universitypolicies/default.aspx</a>. However, below are several policies that are specific to this class:

- 1. **Unannounced quizzes** There are no unannounced ("pop") quizzes in this course. All exams are scheduled, although the specific dates can be changed (see calendar below).
- 2. **Plagiarism Policy** There are no group assignments or projects in this course. All exams and any other written work must reflect the individual efforts of each student.
- 3. **E-mail** The University has requested that all students use their Auburn University email accounts. This is the most efficient way for instructors to communicate with an entire class, and the University will occasionally send global notices that are important for all students. I request that you check your AU e-mail account regularly.
- 4. **Cell Phones** As a courtesy to others, please turn off your cell phone during class. If you are expecting an emergency call, please let me know at the beginning of class. Also, please do not text—message or tweet during class, or use laptops for anything other than looking at the lecture slides and taking notes.
- 5. **Disability Accommodations** Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).
- 6. Attendance "Taking a class" means attending all meetings of the class. You may miss 3 lectures without penalty. Thereafter, 1 point will be deducted from your final average for each unexcused absence. Documentation, such as a doctor's note, for excused absences must be submitted to me on the day you return to class and must clearly indicate the dates that are to be excused. You may not wait until the end of the semester to submit documentation for prior absences. If you miss an exam, legitimate documentation (e.g., medical, court appearance, AU athletics) must be provided and you must make up the exam within 24 hours of returning to class.

### **Class Schedule and Reading Assignments**

Note: Exam dates are tentative and subject to change at the discretion of the instructor. Advanced notice will be given if there are any changes to the following schedule.

Chapter 1 - The nature and Purpose of Research Chapter 2 - Understanding the Research Process

Chapter 3 - Reviewing the Literature

Chapter 5 - Developing the Research Plan (only pp. 91–96)

LIBRARY ASSIGNMENT DUE - January 28 (Tuesday)

EXAM #1 - January 30 (Thursday)

Chapter 6 - Ethical Concerns in Research

Chapter 4 - Reading and Evaluating Research Reports

Chapter 16 - Developing the Research Proposal

Chapter 7 - Selection of Research Participants: Sampling Procedures

EXAM #2 - February 25 (Tuesday)

Chapter 13 - Descriptive Data Analysis Chapter 14 - Inferential Data Analysis

EXAM #3 - April 1 (Tuesday)

Chapter 8 - Experimental Research

Chapter 9 - Descriptive Research (only pp. 178–179: Developmental Research)

No chapter - Quality Control in Research

**REVIEW ALL EXAMS** 

FINAL EXAM - May 1 (Thursday, 8:00 - 10:30 AM)

### No Classes

January 20 (Monday) - M. L. King Day March 11 & 13 (Tue & Thu) - Spring Break

April 3 (Thursday) - AAHPERD Convention (St. Louis)