Spring, 2011 M. G. Fischman

KINE 3650 - MOTOR LEARNING & PERFORMANCE (4 cr.)

Lecture: Mon., Wed., 12:00 - 1:15 PM (MC 1081)

Lab: (001) Tue, (002) Thur, 1:00 – 2:50 PM (HC 1435)

Instructor

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

Office hours: M Tu W Th, 9 - 10 AM. Other times by appointment.

Graduate Assistant/Lab Instructor

Mike Urbin, Motor Behavior Center, 1466 Haley, 844-1480. E-mail: mau0003@auburn.edu

Prerequisite

KINE 3020 - Scientific Foundations of Kinesiology

Textbook and Supplies

Rose, D. J., & Christina, R. W. (2006). *A Multilevel Approach to the Study of Motor Control and Learning (2nd ed.).* Calculator, and knowledge of Excel or other graphing program (for labs).

Course Description

Study of the processes that influence motor skill learning and performance from a behavioral level of analysis. Addresses the question of how humans learn and control simple and complex movement skills. Understanding the basic psychological processes in learning and control of movement will help teachers and coaches provide better instruction and practice for the motor skills performer. The course also has applications for those who plan to work in rehabilitation, physical therapy, occupational therapy, and industrial settings.

Course Objectives

Upon completion of this course, students will understand:

1. The characteristics and measurement of motor skills;
2. Theoretical aspects of how the nervous system controls coordinated movement and learning, and limitations built into the system;
3. How a variety of instructional and practice conditions influence the acquisition of motor skills;
4. How individual differences among learners influence motor skill acquisition and performance.

Evaluation		Final Letter Grade	
Exam #1	- 15%	90.0 - 100	= A
Exam #2	- 15%	80.0 - 89.9	= B
Exam #3	- 15%	70.0 - 79.9	= C
Final Exam	- 25%	60.0 - 69.9	= D
Lab Work	- 30%	Under 60.0	= F

Exams consist of 70% for multiple-choice questions based on lectures, plus 30% for "Test Your Understanding" questions from the textbook (see next page). The final exam is semi-comprehensive, consisting of new material plus some repeat questions from the three previous exams.

Lab Reports

Mike Urbin will provide you with details about labs, attendance, lab reports, and the lab schedule.

Lecture Topic Outline and Schedule

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 - Introduction to Motor Control
Chapter 2 - Scientific Measurement and Motor Control
Chapter 6 - Introduction to Motor Learning (only pp. 171-178)
EXAM 1 - February 7 (Monday)

Chapter 3 - Somatosensory Contributions to Action
Chapter 4 - Visual and Vestibular System Contributions to Action
Chapter 5 - Developing and Executing a Plan of Action
EXAM 2 - March 7 (Monday)

Chapter 6 - Introduction to Motor Learning
Chapter 7 - How Motor Learning is Studied
Chapter 8 - Setting the Stage for Motor Learning
Chapter 12 - Transfer of Learning
EXAM 3 - April 6 (Wednesday)

Chapter 9 - Organizing the Practice Environment
Chapter 10 - Augmented Feedback and Motor Learning
FINAL EXAM - May 4 (Wednesday), 12:00 - 2:30 PM

"Test Your Understanding" Questions for Each Exam - due exam day; worth 30% of each exam. These are to be **neatly typed**. Put your name at the top of each page. Number the questions as they are numbered in the textbook. **Please do not staple the pages together;** I will do that at the exam.

Exam 1 (February 7)
Chapter 1, p. 30 (# 1, 4, 6, 7, 8, 9)
Chapter 2, p. 57 (# 2, 4, 6, 8, 9)
Chapter 6, p. 193 (# 3, 4, 5, 7)

Exam 2 (March 7)
Chapter 3, p. 90-91 (# 5, 9, 11, 13, 14)
Chapter 4, p.125 (# 1, 4, 6, 10, 15)
Chapter 5, p. 164 (# 6, 7, 9, 11, 13)

Exam 3 (April 6)
Chapter 6, p. 193 (# 2, 8, 9)
Chapter 7, p. 221-222 (# 1, 6, 9, 10)
Chapter 8, p. 250-251 (# 4, 6, 8, 16)
Chapter 12, p. 389 (# 2, 5, 8, 9)

Final Exam (May 4)
Chapter 9, p. 289-290 (# 3, 4, 7, 11, 12, 13, 15, 17)
Chapter 10, p. 319-320 (# 3, 4, 5, 11, 13, 14, 15)

Class Policy Statements

Unannounced quizzes - There are no unannounced quizzes in this course.

Attendance - For lectures, the first two absences are "free." For each unexcused absence thereafter, 1 point will be deducted from the student's final average. In case of truly excessive absences, a grade of "FA" will be assigned. Please refer to the *Tiger Cub* for definitions of excused absences. If you miss an exam, legitimate documentation must be provided and you must make up the exam within 24 hours of returning to class.

Plagiarism - Unless explicitly announced by your instructor, there are no group assignments or projects in this course. All exams (including study questions), lab reports, and any other written work must reflect the individual efforts of each student.

E–mail - The University has requested that all students use their Auburn University e–mail 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.

Cell Phones - As a courtesy to everyone, 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 during class.

Disability Accommodations - Students who need accommodations are asked 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. Through tiger i, you will electronically notify me of your accommodation needs. An appointment with the instructor will still be required; however, no visits to the Program for Students with Disabilities office to obtain the memo will be needed. If you need more information, make an appointment with **The Program for Students with Disabilities**, 1228 Haley Center, 844-2096.