

Spring, 2014

M. G. Fischman

KINE 3650 (002) – MOTOR LEARNING & PERFORMANCE (4 cr.)

Lecture: Mon., Wed., Fri., 8:00 – 8:50 AM (Haley Center 1435)

Lab: Thur., 1:00 – 2:50 (Haley Center 2352)

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.

Textbook (Required)

Magill, R. A., & Anderson, D. I. (2014). *Motor Learning and Control: Concepts and Applications (10th ed.)*. McGraw-Hill.

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, industry, or military 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 Reports	– 30%	Under 60.0 = F

The first three exams consist of 70 points for multiple-choice questions (70 questions) based on lectures, plus 30 points for “Study Questions” from the textbook (see next page). The final exam is semi-comprehensive, consisting of new material (70 questions), plus 10 repeat questions from each of the three previous exams (100 total questions), plus study questions from the textbook. The final exam contains 130 points.

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 – The Classification of Motor Skills
Chapter 2 – The Measurement of Motor Performance
Chapter 3 – Motor Abilities
Chapter 5 – Motor Control Theories
Chapter 7 – Performance and Motor Control Characteristics of Functional Skills (only pp. 139-154)
EXAM 1 – January 30 (Thursday)

Chapter 6 – Sensory Components of Motor Control
Chapter 7 – Performance and Motor Control Characteristics of Functional Skills (only pp. 154-170)
Chapter 8 – Action Preparation
Chapter 9 – Attention as a Limited Capacity Resource
EXAM 2 – February 27 (Thursday)

Chapter 11 – Defining and Assessing Learning
Chapter 12 – The Stages of Learning
Chapter 13 – Transfer of Learning
Chapter 14 – Demonstration and Verbal Instructions
EXAM 3 – March 27 (Thursday)

Chapter 16 – Practice Variability and Specificity
Chapter 17 – The Amount and Distribution of Practice
Chapter 18 – Whole and Part Practice
Chapter 19 – Mental Practice
Chapter 15 – Augmented Feedback
FINAL EXAM – April 28 (Monday), 4:00 – 6:30 PM

“Study Questions” for Each Exam - due on exam day; worth 30 points on 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 (January 30)

Chapter 1, p. 24 (# 1, 2, 7)
Chapter 2, p. 51 (# 2, 5, 7)
Chapter 3, p. 66 (# 3, 4, 6)
Chapter 5, p. 111 (# 1, 6, 7)
Chapter 7, p. 171 (# 2, 3, 4)

Exam 2 (February 27)

Chapter 6, p. 138 (# 2, 5, 7, 9)
Chapter 7, p. 171 (# 7, 8, 9)
Chapter 8, p. 197 (# 1, 3, 7, 8)
Chapter 9, pp. 227 (# 2, 4, 5, 6)

Exam 3 (March 27)

Chapter 11, p. 272 (# 1, 3, 4, 6)
Chapter 12, p. 297 (# 2, 3, 4, 5)
Chapter 13, p. 316 (# 2, 3, 4)
Chapter 14, p. 342 (# 2, 3, 4, 5)

Final Exam (April 28)

Chapter 16, p. 404 (# 1, 4, 7)
Chapter 17, pp. 419-420 (# 2, 3, 6)
Chapter 18, p. 438 (# 1, 3, 5)
Chapter 19, p. 452 (# 2, 4, 5)
Chapter 15, p. 379 (# 3, 7, 8)

Lab Reports

There are two types of labs in this course. Lab # 1, 2, 3, and 8 involve either giving you a set of data, or collecting data in class, and having you prepare a lab report with appropriate analyses, graphs (Excel or other graphing program), and discussion. **Attendance is required at these labs.** These reports will be graded primarily on their completeness, accuracy, and professional preparation (i.e., correct English). These lab reports are **due the Monday following the lab class.**

The second type of lab report (Lab # 4, 5, 6, and 7) will involve your verification of the accuracy of statements found in Magill and Anderson's textbook against the original source. For 8 chapters in the textbook (details below), you will select a factual statement from one reference (the statement can be about an experiment's data or results, a definition, a figure, or a table) and provide the following information:

1. Type the reference citation in APA format (authors, article title, journal name, volume number, and page numbers).
2. Give the textbook page(s) where the citation is mentioned. What does the textbook say about the material? Quote the passage from the textbook.
3. Where is this information found in the original source (journal article)? What does the source say?
4. Is the textbook correct in its interpretation of the original source? Briefly justify your answer.
5. Also turn in a photocopy of the page(s) from the original source. Highlight or underline the relevant spots. **You do not need to submit the entire article.** These reports are also **due on Mondays (see schedule below).**

Lab Schedule

January 9	Lab 1 – Plotting and Graphing Data
January 16	Lab 2 – Error Scores
January 23	Lab 3 – Relationship Between Speed and Accuracy
February 10	Lab 4 – Chapters 6 and 7
February 24	Lab 5 – Chapters 8 and 9
March 17	Lab 6 – Chapters 11 and 12
April 14	Lab 7 – Chapters 17 and 18
April 17	Lab 8 – Precision of Augmented Feedback

Class Policy Statements

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

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

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. If you do not attend a data-collection lab (Lab 1, 2, 3, and 8) you may not submit a lab report. A grade of “0” will be recorded.

Plagiarism – Unless explicitly announced by your instructor, there are no group assignments or group projects in this course. All exams (including textbook 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 or tweet during class, or use laptops for anything other than looking at the lecture slides and taking notes.

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).

No Classes

January 20 (Monday)	-	M. L. King Day
March 10 - 14 (Mon - Fri)	-	Spring Break
April 2 - 4 (Wed - Fri)	-	AAHPERD Convention (St. Louis)