

GEORGE MASON UNIVERSITY  
School of Recreation, Health and Tourism  
PHED 306 – Motor Learning and Performance (3)  
Spring 2010

DAY/TIME:	W 7:20 – 10:00 pm	LOCATION:	Bull Run Hall, Rm 249
PROFESSOR:	Mr. John Jones		
OFFICE LOCATION:	N/A	OFFICE HOURS:	By appointment
PHONE NUMBER:	571-205-9191	FAX NUMBER:	703-993-2025
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**PREREQUISITES:**

None

**COURSE DESCRIPTION:**

This course is designed to provide students with an understanding of the fundamental process humans use to learn any motor skills (e.g., playing the violin, starting an intravenous line, kicking a ball, walking with an artificial limb, etc.). Students will learn physical, cognitive, behavioral and social principles, facts, and concepts underpinning motor learning and performance.

**COURSE OVERVIEW**

Students will be engaged in reasoning using quantitative and qualitative information, and the analysis of empirical observations in relation to theories while involved in a series of laboratory exercises and projects.

**COURSE OBJECTIVES**

At the completion of this course students should be able to:

1. Show the application of motor learning principles by defining "skill" and identifying various skill classifications;
2. Using the concept of "Stages of processing" utilized by psychologists, describe the information processing stages as it relates to motor learning and performance;
3. Demonstrate the rationale and characteristics of motor programs;
4. Describe the concept of individual differences related to the nature of motor abilities;
5. Apply motor learning, behavioral and social laws and principles in the learning and teaching of a novel motor skill;
6. Explain how the structure of the learning experience relates to the development of skillful movement for all learners;
7. Use a variety of feedback to communicate progress in the development of skillful movement;
8. Use different strategies to increase self-motivation and motivation of their learner during the acquisition of novel motor skills; and
9. Manage time, space and equipment combined with an instructional routine for teaching a novel skill to a novice learner.

**REQUIRED READINGS**

Schmidt R., & Wrisberg, C.A. (2008). Motor learning and performance: A Situation-based learning approach (4th ed.). Champaign, IL: Human Kinetics.

## EVALUATION

### *Requirements*

3 Tests at 75 pts each	= 225 pts (45%)
5 Laboratory Reports at 20 pts each:	= 100 pts (20%)
2 Projects at 50 pts each	= 100 pts (20%)
Final exam	= 75 pts (15%)

### Projects

- Project 1: Student will document his/her personal development in learning a novel motor skill. A quantitative and qualitative report will be submitted at the end of the experiment reporting on the skill level reached, and the various strategies used to improve and motivate oneself.
- Project 2: Student will examine the development of motor skill learning in a novice learner. A qualitative report will be submitted at the end of the experiment reporting on the various strategies used to improve the learner's skill level. Concepts presented in class will be utilized throughout the report to explain the different events that occurred during the experiment.

### *Attendance Policy*

In accordance with the GMU Attendance Policies (University catalog, 2004-2005 p.33), "Students are expected to attend the class periods of the courses for which they register. In-class participation is important to the individual student and to the class as a whole. Because class participation may be a factor in grading, instructors may use absence, tardiness or early departure as de facto evidence of non-participation."

### **The following scale will be used**

- Two (2) absences are permitted
- Two (2) "tardies"\* = 1 absence
- Two (2) "early departures"\* = 1 absence
- 3-4 absences = 10 points
- 5 absences or more = 15 points

### *Grading Scale*

465 – 500=A	450 – 464=A-	435 – 449 =B+	415 – 434=B	400 – 414=B-
385 – 399=C+	365 – 384=C	350 – 364=C-	300-349=D	<300 = F

## COURSE OUTLINE

### **DAY DATE CHPT**

Wed 01/20 1-2

### **LECTURE/DISCUSSION TOPIC/LABORATORY**

Presentation of syllabus, Introduction to Motor Learning & Performance, Categories of skills,

Wed 01/27 2

Processing information and making decisions; **Lab #1: Bimanual Coordination, Introduce Project Phase 1**

Wed 02/03 2-3

Processing Information and making decisions;  
Sensory Contribution to Skilled Performance: The Closed-loop System

Wed 02/10 3

Sensory Contribution to Skilled Performance: The Closed-loop System and the Visual System. **LAB #2 Vision and Object Manipulation.** Review Test #1

Wed	02/17	4-5	<b>TEST #1</b> on Chapters 1, 2 and 3 Motor program theory, principles of motor control and movement Accuracy; <b>LAB #3: Fitt's Law</b> <b>Project Phase 1 due</b>
Wed	02/24	6	Individual differences and motor abilities; Review Test 2
Wed	03/03	7	<b>TEST #2</b> on Chapters 4, 5 and 6 Preparation and Strategies to design practice; <b>Introduce Project Phase 2</b>
Wed	03/10		<b>SPRING BREAK</b>
Wed	03/17	8	Supplementing the Learning Experience
Wed	03/24	8-9	Supplementing the learning experience Structuring the learning experience
Wed	04/07	9	<b>LAB #4: Variability of Practice</b> Structuring the learning experience
Wed	04/14	10	<b>TEST #3</b> on Chapters 7, 8 and 9; Feedback on skill learning
Wed	04/21	10	Feedback on Skill Learning; LAB #5 KR
Wed	04/28	11	<b>Project Phase 2 Due</b> Integration and Application; Review for Final Exam

**FINAL EXAM: Per University Schedule, Final Exam on May 5, 2010 at 7:30 pm**



- ❖ All students are held to the standards of the George Mason University Honor Code.
- ❖ **STUDENTS WITH DISABILITIES:** Students having documentation on file with the Disability Support Services Office should bring this to the attention of the instructor
- ❖ All electronic devices must be turned off during classes.
- ❖ For more information on the School of Recreation, Health and Tourism, please go to <http://rht.gmu.edu>