

GEORGE MASON UNIVERSITY  
School of Recreation, Health and Tourism  
PHED 306 – Psychomotor Learning (3cr)  
Spring 2012

DAY/TIME:	Mon, Wed 9:00 - 10:10 am	LOCATION:	Occoquan, Rm 318
PROFESSOR:	Dr. Matthew Ferry		
OFFICE LOCATION:	Bull Run Hall, Office 207	OFFICE HOURS:	Mon, Wed 10:30 - 12:30 am
PHONE NUMBER:	703-993-2026	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, running, performing a Yoga asana, etc.). Students will learn physical, cognitive, behavioral and social principles, facts, and concepts underpinning motor learning and performance.

**COURSE OVERVIEW**

Students will deliberate and examine course subject matter using quantitative and qualitative information, and analyze empirical observations in relation to theories while involved in a series of laboratory exercises and projects.

Students are held to the standards of the George Mason University Honor Code. Students are expected to attend all class sections, actively participate in class discussions, complete in-class exercises and fulfill all assignments. Assignments must be turned in at the beginning of class on the specified date due or **no credit will be given**.

**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 the 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.

**NATURE OF DELIVERY**

Course will be face to face lecture and lab.

## REQUIRED READINGS

Cocker, C. A. (2009). *Motor Learning and Control for Practitioners* (2nd ed.). Scottsdale, AZ: Holcomb Hathaway Publishers.

## EVALUATION

### Requirements

3 Tests at 50 pts each	= 150 pts
7 Laboratory Reports at 10 pts each:	= 70 pts
2 Projects at 50 pts each	= 100 pts
Final exam	= <u>80 pts</u>
Total	400 pts

### 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: Video Analysis. Videotaping and conducting a performance analysis of a skill unfamiliar to a learner performed by a participant of the student's choice.

### Important assignment notes:

- 1) Only seven of the eight labs will count toward final grades. The lowest score will be dropped, if, and only if, all eight labs are submitted on time.
- 2) The final exam and exam 3 are rolled into one exam.
- 3) Coffee discussion...worth 10 bonus points.
- 4) Potential Pop Quizzes.

### 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

- One (1) absence is permitted
- Two (2) tardies or early departures\* = 1 absence
- 2 absences = - 10 points
- 3 absences or more = - 15 points
- Every absence thereafter = -5 more points

\*Attendance is taken at 9:00 a.m. A student will be considered late once attendance has been taken. Leaving more than 10 minutes before the end of the class will be considered an early departure.

### Grading Scale

388 - 400 = A+	372 - 387 = A	360 - 371 = A-	348 - 359 = B+	332 - 347 = B	320 - 331 = B-
308 - 319 = C+	292 - 307 = C	280 - 291 = C-	240-279 = D	<240 = F	

## TENTATIVE COURSE OUTLINE

<u>DAY</u>	<u>DATE</u>	<u>CHAPTER</u>	<u>LECTURE/DISCUSSION TOPIC/LABORATORY</u>
M	01/23		Presentation of the syllabus. Course overview
W	01/25	1	Introduction to Motor Learning & Control
M	01/30	1	Introduction to Motor Learning & Control, <b>Lab #1 Abilities</b>
W	02/01	2	Understanding Movement Preparation

<u>DAY</u>	<u>DATE</u>	<u>CHAPTER</u>	<u>LECTURE/DISCUSSION TOPIC/LABORATORY</u>
M	02/06	2	Understanding Movement Preparation, <b>Lab #2 Hicks Law</b>
W	02/08	2	Understanding Movement Preparation, <b>Lab #3 Attentional Capacity</b>
M	02/13	3	Motor Program Theories. <b>Introduce Project 1</b>
W	02/15	4	Neural Mechanisms: Contribution and Control
M	02/20	4	Neural Mechanisms: Contribution and Control, <b>Lab #4 Vision and Ball Catching</b>
W	02/22		Review Test #1
M	02/27		<b>Test #1 on Chapter 1, 2, 3, &amp; 4</b>
W	02/29	5	Stages of Learning
M	03/05	6	The Learner
W	03/07	7	Skill Presentation
M	03/12		<b>NO CLASS</b>
W	03/14		<b>SPRING BREAK</b>
M	03/19	7	Skill Presentation, <b>Lab #5 Modeling and Verbal Instruction</b>
W	03/21	8	Principle of Practice Design
M	03/26	8	Principle of Practice Design, <b>Lab #6 Speed-Accuracy Trade-off</b>
W	03/28		<b>Project 1 Due</b> Review Test #2. <b>Introduce Project 2</b>
M	04/02		<b>Test #2 on Chapter 5, 6, 7, &amp; 8</b>
W	04/04	9	Practice Schedule
M	04/09	9	Practice Schedule, <b>Laboratory #7 Variability of Practice</b>
W	04/11	10	Diagnosing Errors
M	04/16		<b>NO CLASS (Conference)</b>
W	04/18	11	Correcting Errors
M	04/23	11	Correcting Errors, <b>Laboratory #8 Knowledge of Results</b>
W	04/25		<b>Project 2 Due</b> Project 2 presentations
M	04/30		Project 2 presentations
W	05/02		Review Final/Exam 3

**FINAL EXAM/EXAM 3:** Per Final Exam Schedule, Monday May 14, 2012, **7:30 am- 10:15 am**



#### *Student Expectations*

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

#### *Campus Resources*

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <http://rht.gmu.edu>].

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CORE VALUES COMMITMENT: The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles.

