

GEORGE MASON UNIVERSITY  
School of Recreation, Health and Tourism  
PHED 306 – Motor Learning and Performance (3)  
Fall 2012

DAY/TIME: M-W 9:00 – 10:15 am      LOCATION: Bull Run Hall, Rm 248  
PROFESSOR: Dr. Dominique Banville  
OFFICE LOCATION: Bull Run Hall Rm 208      OFFICE HOURS: M-W 10:30 – 11:30  
PHONE NUMBER: 703-993-3579      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.

**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*

2 Tests at 70 pts each	= 140 pts
9 Laboratory Reports at 10 pts each:	= 90 pts
2 Projects at 50 pts each	= 100 pts
Final exam	= <u>70 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. A brief oral summary will be presented in class.

Project 2: Video Analysis. Videotaping posted on [www.youtube.com](http://www.youtube.com) and performance analysis of a skill unfamiliar to the student performed by a participant of your choice documented and submitted electronically to the instructor.

### *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

*Attendance is taken at 9:00 am. 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.
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### *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

### **DAY DATE CHAPTER LECTURE/DISCUSSION TOPIC/LABORATORY**

M	08/27	1	Presentation of the syllabus; Introduction to Motor Learning & Control
W	08/29	1	Introduction to Motor Learning & Control. <b>LAB #1 Abilities.</b>
M	09/03	<b>NO CLASS – LABOR DAY RECESS</b>	
W	09/05	1, 2	Understanding Movement Preparation <b>Lab #2:Hicks Law. PHED SOCIAL (10:00- 11:00)</b>

<u>DAY</u>	<u>DATE</u>	<u>CHAPTER</u>	<u>LECTURE/DISCUSSION TOPIC/LABORATORY</u>
M	09/10	2	No class meeting – <b>Lab #3: Gentile’s Taxonomy to be performed on your own.</b>
W	09/12	2	Understanding Movement Preparation
M	09/17	2	Understanding Movement Preparation; <b>Lab #4: Attentional Capacity</b>
W	09/19	3	Motor Program Theories. <b>Introduce Project phase 1</b>
M	09/24	4	Neural Mechanisms: Contribution and Control.
W	09/26	4	Neural Mechanisms: Contribution and Control. <b>Lab #5 Vision and Ball Catching</b>
M	10/01	4	Neural Mechanisms: Contribution and Control. Review Test #1
W	10/03		<b>TEST #1 on Chapter 1, 2, 3, &amp; 4</b>
M	10/08		<b>NO CLASS – COLUMBUS DAY RECESS</b>
Tu	10/09	5	Stages of Learning
W	10/10	5,6	Stages of Learning; The Learner
M	10/15	6	The Learner
W	10/17	7	Skill Presentation
M	10/22	7	Skill Presentation; <b>Lab #6 Modeling and Verbal Instruction</b>
W	10/24	8	Principle of Practice Design. <b>Project phase 1 due</b>
M	10/29	8	Principle of Practice Design. <b>Lab #7 Speed-Accuracy Trade-off</b>
W	10/31		Review Test #2. <b>Introduce Project 2.</b>
M	11/05		<b>Test #2 on Chapter 5, 6, 7, &amp; 8</b>
W	11/07	9	Practice Schedule; <b>Laboratory #8: Variability of Practice</b>
M	11/12	9	Practice Schedule
W	11/14	10	Diagnosing Errors
M	11/19	10	Diagnosing Errors
W	11/21		<b>NO CLASS – THANKSGIVING RECESS</b>
M	11/26	11	Diagnosing Errors
W	12/28	11	Correcting Errors;
M	12/03	11	Correcting Errors – <b>Laboratory #9: Knowledge of Results – Project 2 Due.</b>
W	12/05		Correcting Errors – Review Final

**FINAL EXAM:** Per Final Exam Schedule, Monday December 17, 2012, **8:00 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>].

**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.

