#### GEORGE MASON UNIVERSITY

School of Recreation, Health and Tourism PHED 306 – Motor Learning and Performance (3) Spring 2011

DAY/TIME: W 7:20 – 10:00 pm LOCATION: Bull Run Hall, Rm 246

PROFESSOR: Mr. John Jones

OFFICE LOCATION: NA OFFICE HOURS: NA

PHONE NUMBER: 571-205-9191 FAX NUMBER: 703-714-5859

EMAIL ADDRESS: jjon3@gmu.edu

## **Description Prerequisites**

None

Semesters taught: Fall and Spring terms

COURSE DESCRIPTION: Analyzes psychological aspects, learning theory, and practice conditions for learning motor skills.

#### **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.

Students are held to the standards of the George Mason University Honor Code. You 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 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

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 (37.5%)
7 Laboratory Reports at 10 pts each: = 70 pts (17.5%)
2 Projects at 50 pts each = 100 pts (25%)
Final exam = 80 pts (20%)
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 performance analysis of a skill unfamiliar to the student performed by a participant of your choice.

#### 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."

\*Attendance is taken at 7:20 p.m. A student

will be considered late once attendance has

been taken. Leaving more than 10 minutes

an early departure.

before the end of the class will be considered

# The following scale will be used

- One (1) absence is permitted
- o Two (2) "tardies"\*= 1 absence
- o Two (2) "early departures" \*= 1 absence
- $\circ$  2 absences = -10 points
- o 3 absences or more = -15 points

**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

#### LECTURE/DISCUSSION TOPIC/LABORATORY DAY DATE CHAPTER 01/26 Presentation of the syllabus; Introduction to Motor Learning & Control; 1 Introduction to Motor Learning & Control. LAB #1 Abilities. W 02/02 1, 2 Understanding Movement Preparation Lab #2:Hick's Law. W 2,3 02/09 Lab #3: Attentional Capacity; Motor Program Theories. Introduce Project phase 1; Review Test #1 W 02/16 Test #1 on Chapter 1, 2, & 3; Neural Mechanisms: Contribution and 4 Control. Lab #4 Vision and Ball Catching W 02/234 Neural Mechanisms: Contribution and Control.

W	03/02	5	Stages of Learning
W	03/09	6	The Learner – Review Test #2 <b>Project phase 1 due</b>
W	03/16		SPRING BREAK
W	03/23	7	Test #2 on Chapters 4, 5, & 6; Skill Presentation
W	03/30	7, 8	Skill Presentation; Principle of Practice Design. Introduce Project 2
W	04/06	8	Principle of Practice Design. Lab #5 Speed-Accuracy Trade-off
W	04/13	9	Practice Schedule; Laboratory #6: Variability of Practice and Schema Development
W	04/20	10	Test #3 on Chapters 7, 8, & 9; Diagnosing Errors
W	04/27	10, 11	Diagnosing Errors; Correcting Errors Project 2 Due.
W	05/04	11	Correcting Errors; Laboratory #7: Knowledge of Results; Review Final

FINAL EXAM: Per Final Exam Schedule, Wednesday May 11, 2011, 7:20 – 10:00 pm



#### 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 <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>].
- Students must follow the university policy for Responsible Use of Computing [See <a href="http://universitypolicy.gmu.edu/1301gen.html">http://universitypolicy.gmu.edu/1301gen.html</a>].
- 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <a href="http://rht.gmu.edu">http://rht.gmu.edu</a>].