#### GEORGE MASON UNIVERSITY

School of Recreation, Health and Tourism
PHED 306 – Motor Learning and Performance (3)
Spring 2014

DAY/TIME: M-W 9:00 – 10:15 am LOCATION: Bull Run Hall, Rm 249

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

EMAIL ADDRESS: <u>dbanvill@gmu.edu</u>

### PREREQUISTES:

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 underpining 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.

#### PROFESSIONAL ASSOCIATION STANDARDS - NASPE/CAEP

Standard 1: Scientific and Theoretical Knowledge: Physical education teacher candidates know and apply discipline-specific scientific and theoretical concepts critical to the development of physically educated individuals.

Standard 4: Instructional Delivery and Management: Physical education teacher candidates use effective communication and pedagogical skills and strategies to enhance student engagement and learning.

#### 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 =  $\frac{70 \text{ pts}}{400 \text{ pts}}$ 

### Description:

### **Tests**

Tests 1 will focus on Chapters 1-4 and Test 2 will focus on Chapters 5-8. A study guide will be provided for each test clearly identifying the material that will be covered. A mixture of short answer, true/false, and multiple choice questions will be used.

# **Laboratory Reports**

For each Lab a handout will be provided explaining the purpose of the lab, the tasks that have to be performed and the conditions in which to perform these tasks. Data will have to be collected and reported on the lab report along with questions linked to the data collected. Labs will be performed in class except for Lab #4 – Gentile's Taxonomy and Lab #5 – Vision and Ball Catching who will be performed on your own. Attendance is necessary to qualify for all the points attached with a lab report. All reports are due the following class period at the beginning of class either in hard copy or electronically unless otherwise indicated on the "Tentative Schedule". If absent for the lab, data can be obtained from a peer but only the questions that are linked with the data will be graded.

### **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 rubric posted on Blackboard will be used to grade this assignment.
- Project 2: Student will videotape, analyze, and provide feedback to a participant executing an unfamiliar motor skill. Video files and a report will have to be submitted electronically to the instructor. A rubric posted on Blackboard will be used to grade this assignment.

#### Final Exam

The final exam will focus on Chapters 9-11 and some content from Chapters 1-8. A study guide will be provided for the exam clearly identifying the material that will be covered. A mixture of short answer, true/false, and multiple choice questions will be used.

# 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

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

Grading Scale

388 - 400 = A + 372 - 387 = A 360 - 371 = A

308 – 319=C+ 292 – 307=C 280 – 291=C-

\*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.

348 – 359 =B+ 332 – 347=B 320 – 331=B-240-279=D <240 = F

#### TENTATIVE COURSE OUTLINE

<b>DAY</b>	<b>DATE CHAPTER</b>		LECTURE/DISCUSSION TOPIC/LABORATORY
W	01/22	1	Presentation of the syllabus; Introduction to Motor Learning & Control
M	01/27	1	Introduction to Motor Learning & Control.
W	01/29	1, 2	Introduction to Motor Learning & Control. LAB #1 Abilities.
M	02/03	2	Understanding Movement Preparation; Lab #2:Hicks Law. Introduce Project phase 1
W	02/05	2	Understanding Movement Preparation; Lab #3: Attentional Capacity – <b>Due electronically by Monday 02/10 9:00 am</b>
M	02/10	3	<b>No class meeting –</b> Course content on Blackboard. Motor Program Theories. <i>Lab #4: Gentile's Taxonomy.</i> <b>– Lab and Chapter 3 Questions due electronically by Monday 02/17, 9:00 am.</b>
W	02/12	4	No class meeting – Course content on Blackboard. Neural Mechanisms: Contribution and Control.
M	02/17	4	<b>No class meeting –</b> Course content on Blackboard. Neural Mechanisms: Contribution and Control. <i>Lab #5 Vision and Ball Catching.</i> <b>Due electronically by Monday 02/24, 9:00 am.</b>
W	02/19	4	No class meeting – Course content on Blackboard. Neural Mechanisms: Contribution and Control. Chapter 4 Questions due electronically by Monday 02/24, 9:00 am.
M	02/24		No Class
W	02/26		No Class
M	03/03		Review for Test
W	03/05		TEST #1 on Chapter 1, 2, 3, & 4
M	03/10		SPRING BREAK

W	03/13		SPRING BREAK
<b>DAY</b>	DATE C	<b>HAPTER</b>	LECTURE/DISCUSSION TOPIC/LABORATORY
M	03/17	5	Stages of Learning
W	03/19	6	The Learner <b>Project phase 1 due</b>
M	03/24	7	Skill Presentation; Lab #6 Modeling and Verbal Instruction
W	03/26	7	Skill Presentation Introduce Project 2.
M	03/31	8	Principle of Practice Design. Lab #7 Speed-Accuracy Trade-off
W	04/02	8	Principle of Practice Design. Review Test #2.
M	04/07		No Class
W	04/09		Test #2 on Chapter 5, 6, 7, & 8
M	04/14	9	Laboratory #8: Variability of Practice
W	04/16	10	Practice Schedule
M	04/21	9	Practice Schedule
W	04/23	10	Diagnosing Errors
M	04/28	10	Diagnosing Errors
W	04/30	11	Correcting Errors – Laboratory #9: Knowledge of Results
M	05/05	11	Correcting Errors – Review Final – <b>Project 2 Due</b> .

FINAL EXAM: Per Final Exam Schedule, Monday May 12, 2014, <u>8:30</u> am- 10:15 am

#### Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <a href="http://oai.gmu.edu/honor-code/">http://oai.gmu.edu/honor-code/</a>].
- 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/policies/responible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responible-use-of-computing/</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.

# 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 <a href="http://caps.gmu.edu/">http://caps.gmu.edu/</a>].
- 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>].

PROFESSIONAL BEHAVIOR: Students are expected to exhibit professional behaviors and dispositions at all times.

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.

