George Mason University
College of Education and Human Development
Health and Physical Education
PHED 306 (001) – Psychomotor Learning
3 Credits, Fall 2017
Mondays/7:20 – 10 PM, Bull Run Hall, Rm 148

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Prerequisites/Corequisites None

REQUIRED TEXT Cocker, C. A. (2013). Motor Learning and Control for Practitioners (3rd ed.). Scottsdale, AZ: Holcomb Hathaway Publishers. (PLEASE buy your copy BEFORE the first class).

University Catalog Course Description: Analyzes psychological aspects, learning theory, and practice conditions for learning motor skills.

Course Overview 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. 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 Delivery Method This course will be delivered using a Lecture format with integrated labs in a face-to-face format. Students need to be present in class to earn points towards their grade.

Learner Outcomes and Objectives This course is designed to enable students to do the following:
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 Standards
Upon completion of this course, students will have met the following professional standards: National Standards for Initial Physical Education Teacher Education (2008) (National Association for Sport and Physical Education (NASPE)) 1.2 Describe and apply motor learning and psychological/behavioral theory related to skillful movement, physical activity and fitness. The Commission on Accreditation of Allied Health Education Programs (CAAHEP) KSA Description
1.9.1 Knowledge of behavioral strategies to enhance exercise and health behavior change (e.g., reinforcement, goal setting, social support).
1.9.3 Knowledge of specific techniques to enhance motivation (e.g., posters, recognition, bulletin boards, games, competitions).
1.9.4 Knowledge of extrinsic and intrinsic reinforcement and give examples of each.
1.9.5 Knowledge of the stages of motivational readiness.
1.9.8 Knowledge of the potential symptoms and causal factors of test anxiety (i.e., performance, appraisal threat during exercise testing) and how it may affect physiological responses to testing.

Course Performance Evaluation
Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, or hard copy as requested).
• **Assignments and Examinations**: Requirements
Tests (2 at 40 pts each) 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 (9 at 10 pts each) 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.
In-Class Activities (11 at 10 points each) At the beginning of each class, students will be given activities to complete based on the assigned readings that will be covered that day of class. Reading the text BEFORE class is imperative to be successful with this specific portion of the course.
Projects (2 at 40 pts each) 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 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.
Final Exam (40 pts) 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.

• **Other Requirements** In accordance with the GMU Attendance Policies (University catalog, 2016-2017), "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 = 20 points o 5 absences or more = 35 points

Course Performance Evaluation Weighting
2 Tests at 40 pts each = 80 pts
9 Laboratory Reports at 10 pts each: = 90 pts
11 In-class activities at 10 points each = 110 pts
2 Projects at 40 pts each = 80 pts
Final exam = 40 pts

Total 400 pts • Grading Policies 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

Professional Dispositions
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: http://cehd.gmu.edu/values/.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the University Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).
- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their Mason 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 with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ods.gmu.edu/).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/students/ .

2017 Fall Semester PHED 306 – Psychomotor Learning & Control Coach Jones

Note: Faculty reserves the right to alter the schedule as necessary w/notification to students.

DAY DATE CHAPTER LECTURE/DISCUSSION TOPIC/LABORATORY

M 08/28 Presentation of the syllabus; Introduction to Motor Learning & Control
1 Introduction to Motor Learning & Control
2 Understanding Movement Preparation

M 09/11 3 Behavior Theories of Motor Control
LAB #1 Abilities, Lab #2: Hicks Law. Lab #3: Gentile's Taxonomy

M 09/18 4 Neural Mechanisms: Contribution and Control
Lab #4: Attentional Capacity Motor Program Theories
Introduce Project phase 1

M 9/25 Review Test #1
Lab #5 Vision and Ball Catching

M 10/02 Project phase 1 due at the beginning of class
TEST #1 on Chapter 1, 2, 3, & 4

TUESDAY 10/10 TBD

M 10/16 5 Stages of Learning
6 The Learner: Pre-Instruction Considerations

M 10/24 7 Skill Presentation
8 Principle of Practice Design
Lab #6 Speed-Accuracy Trade-off

M 10/30 Review Test #2
Introduce Project 2
Lab #7 Variability of Practice & Lab #8 Massed vs Distributed Practice

M 11/06 Test #2 on Chapter 5, 6, 7, & 8

M 11/13 9 Practice Schedule

M 11/20 10 Diagnosing Errors
Lab #9 Knowledge of Results

M 11/27 11 Correcting Errors

M 12/4 Review for Final Exam; Project 2 due at the beginning of class

M 12/18 FINAL EXAM: Per Final Exam Schedule