

George Mason University
College of Education and Human Development
Health and Physical Education
PHED 306 (002) – Psychomotor Learning
3 Credits, Spring 2019
Mondays: 4:30 - 7:10pm, Bull Run Hall, Rm 148

Faculty

Name: Nate Silvis, M.Ed.

Office hours: By Appointment

Office location: Bull Run Hall 202A, Science & Technology Campus

Email address: nsilvis@gmu.edu

Prerequisites

None

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.

Learner Outcomes or 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:

SHAPE America – Society of Health and Physical Education

Standard 1. Content and Foundational Knowledge

- Physical Education candidates demonstrate an understanding of common and specialized content, and scientific and theoretical foundations for the delivery of an effective preK-12 physical education program.

Candidates will:

- 1.d Describe and apply motor learning and behavior-change/psychological principles related to skillful movement, physical activity and fitness for preK-12 students.

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.

Required Texts

Cocker, C. A. (2018). *Motor Learning and Control for Practitioners* (4th ed.). Scottsdale, AZ: Holcomb Hathaway Publishers.

Professional Dispositions Students are expected to exhibit professional behaviors and dispositions at all times. <https://cehd.gmu.edu/students/polices-procedures/>

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

- Students must adhere to the guidelines of the University Honor Code (see <http://oai.gmu.edu/themason-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/api/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.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/>).
- 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 Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <http://studentsupport.gmu.edu/>, and the OSS staff will follow up with the student.

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

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^[L]_[SEP]

Requirements

Tests (2 at 50 pts each – 100 total pts)

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.

Critical Elements Create, Share and Provide Feedback (6 at 5 pts each. 30 total pts)

Students will design/write 4 or 5 critical elements for a specific skill and specific age group, present the critical elements to the class and give corrective feedback

Designing Practices and Practice Schedules worksheet at (20 pts)

The students will choose a skill and design a practice session for the skill and a schedule for teaching the skill, practicing the skill, providing feedback on the performance of the skill and continuing to practice the skill after feedback and corrections.

Laboratory Reports (8 at 10 pts each – 80 pts total)

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.

Projects (2 at 50 pts each – 100 pts total)

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 (70 pts total)

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, 2018-2019), “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 absences = minus 10 points
- 4 absences = minus 20 points
- 5 absences or more = minus 30 points
- 6 absences = minus 35 points
- 7 absences = minus 40 points – teacher discretion for more points
- 8 or more absences – teacher discretion

*Attendance is taken at 4:30 pm. A student will be considered late once attendance has been taken. Leaving more than 15 minutes before the end of the class will be considered an early departure.

Course Performance Evaluation Weighting

2 Tests at 50 pts each	= 100 pts
6 Critical Elements/Skill Analysis Share out at 5 pts each	= 30 pts
1 Designing Practices and Practice Schedules worksheet at 20 pts	= 20 pts
8 Laboratory Reports at 10 pts each:	= 80 pts
2 Projects at 50 pts each	= 100 pts
Final exam	= 70 pts
TOTAL POINTS	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

Class Schedule

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

DAY	DATE	CHP	LECTURE/DISCUSSION TOPIC	LAB
M	1/28	1,6	Presentation of the syllabus; Introduction to Motor Learning & Control	1: Gentiles Taxonomy.
M	2/4	2	Understanding Movement Preparation. C.E. Activity 1	2: Abilities
M	2/11	2,7	2 – Understanding movement preparation 7 – The learner: Pre-instruction considerations	Introduce PROJECT 1 – Skill Acquisition *This project requires 10 consecutive days of data collection – be sure to start early enough. Project due 3/18
M	2/18	3	3- The role of Attention, Arousal, and Visual Search in Movement Preparation C.E. Activity 2	3: Hick’s Law
M	2/25	4	Behavioral Theories of Motor Control Review for Test on Chp 1-4	4: Attentional Capacity
M	3/4		Test on Chp. 1,2,3,4.	
M	3/11		SPRING BREAK – NO CLASS	
M	3/18	5	Project 1 due- Skill Acquisition by 4:30 5 – Neural Mechanisms: Contributions and Control C.E. Activity 3	5: Vision and Ball
M	3/25	8	8 – Skill Presentation Introduce PROJECT 2 – VIDEO ANALYSIS due 5/6	8: Massed vs Distributed practice
M	4/1	9	9 – Principles of Practice and Design C.E. Activity 4	9: Knowledge of Results
M	4/8	10	10 – Practice Schedules Review for Test C.E. Activity 5	
M	4/15		Test on Chp.5,6,7,8,9,10.	
M	4/22	11	6 – Stages of Learning 11- Diagnosing Errors	6: Speed Accuracy Trade-off

M	4/29	12	7 – The Learner, Pre-Instruction Considerations 12 – Correcting Errors	7: Variability of Practice
M	5/6		Project 2 Due at the beginning of class 4:30 REVIEW FOR FINAL EXAM C.E. Activity 6	
M	5/13		FINAL EXAM – Chapters 1 – 12	
	SNOW DAY		Classes missed due to inclement weather will be made up on 5/6 and/or via on-line learning activities	