

**George Mason University**  
**College of Education and Human Development**  
**Health and Physical Education**  
PHED 306 (DL1) – Psychomotor Learning  
3 Credits, Fall 2024  
Monday/4:30, Online via Bb

**Faculty**

Name: Nate Silvis, M.Ed.

Office hours: By Appointment

Office location: NA

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**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 online 100% using an asynchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on the first Monday of the semester **at 4:30 p.m.**

**Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.**

**Learner Outcomes**

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 addressed 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 pre K-12 students.

*The Commission on Accreditation of Allied Health Education Programs (CAAHEP)*

<b>KSA</b>	<b>Description</b>
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. (2022). *Motor Learning and Control for Practitioners* (5<sup>th</sup> ed.). New York, NY, Routledge

**Technical Requirements**

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed internet access with updated browsers.
  - o Blackboard Learn supported browsers: [https://help.blackboard.com/Learn/Student/Ultra/Getting\\_Started/Browser\\_Support](https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support)
  - o Canvas supported browsers: <https://guides.instructure.com/a/720329>
- Consistent and reliable access to GMU email and the course LMS, as these are the official methods of communication for this course.

- Speakers and a microphone or a microphone-enabled headset for use with the synchronous web conferencing tools.
- Note that students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.

## Expectations

- Course Week:  
Because asynchronous courses do not have a “fixed” meeting day, our week will start on Monday at 4:30 p.m. and finish on Monday at 4:30 p.m.
- Log-in Frequency:  
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 2 times per week.
- Participation:  
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:  
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:  
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:  
Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:  
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:  
The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations:  
Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

## Course Performance Evaluation Weighting

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard and GMU email).

ASSIGNMENTS	#	PTS	TOTAL PTS
Activities	8	25	200
Tests Midterm & Final – Bb	2	75	150
Project – Learning a Novice Skills – Bb	1	75	75
Project Video Analysis of Skill – Bb	1	75	75
			500 total pts

### Assignments and Examinations<sup>[1]</sup><sub>SEP</sub> 500 total pts

Requirements

#### Activities (8 at 25 pts each – 200 pts total)

The video challenges, quizzes, worksheets, and activities will check for understanding of key concepts. These items are due by 4:30 pm the Monday after the assigned date.

#### Tests (2 at 75 pts each – 150 total pts)

Tests 1 will focus on Chapters 1-5 and Test 2 will focus on Chapters 6-12. 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.

#### Projects (2 at 75 pts each – 150 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.

### • Grading Scale

488 – 500	A+
472 – 487	A
460 – 471	A-
448 – 459	B+
432 – 447	B
420 – 431	B-
408 – 419	C+
392 – 407	C
380 – 391	C-
340-379	D
340	F

## Use of Generative AI

Use of Generative AI tools should be used following the fundamental principles of Mason's Academic Standards. This includes being honest about the use of these tools for submitted work and including citations when using the work of others, whether individual people or Generative AI tools

## Professional Dispositions (CEHD Student Guide)

Throughout study in the College of Education and Human Development, students are expected to demonstrate behaviors that reflect the positive dispositions of a professional. See

<https://cehd.gmu.edu/current-students/cehd-student-guide>

## Class Schedule

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

## Key Dates:

<b>Project 1</b>	75 pts	<b>*10 consecutive days of data collection required Start project no later than 9/20 due 9/30</b>
<b>Test 1</b>	75 pts	<b>10/21</b>
<b>Project 2</b>	75 pts	<b>12/2</b>
<b>Test 2/Final</b>	75 pts	<b>12/11 released due 12/13</b>

<b>DATE</b>	<b>WORK that needs to be submitted</b>	<b>LECTURE/DISCUSSION TOPIC</b>	<b>ACTIVITY ASSIGNED</b>	
<b>8/26</b>		Presentation of the syllabus Chp 1 - Introduction to Motor Learning & Control Introduce Project 1 Skill Acquisition – 75pts - *This project requires 10 consecutive days of data collection –	Activity 1 - Gentiles Taxonomy assigned–25 pts due next week <b>Project 1 assigned Due 9/30</b>	
<b>9/3</b>	Activity 1 Due – 25pts* Class held this week in exchange for no class during Fall Break	Chp 2 - Understanding Movement Preparation. Activity 1 Due 4:30pm	Activity 2 – Hicks Law assigned – 25 pts	
<b>9/9</b>	Activity 2 Due – 25 pts	Chp 3- The role of Attention, Arousal, and Visual Search in Movement Preparation, Activity 2 Due	Activity 3 Yerkes Dodson assigned – 25 pts	
<b>9/16</b>	Activity 3 Due – 25 pts	Chp 4 - Behavioral Theories of Motor Control Activity 3 Due Email update on Project 1 progress	Email <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a> an update on your Project 1 progress – 10 consecutive days of data collection needed	

<b>9/23</b>	Send an Email to <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a> with an update on your Project 1 progress	Project 1 Check – in Chp 5 – Neural Mechanisms: Contributions and Control	Work on Project 1 due next week	
<b>9/30</b>	Project 1 Due – 75 pts	Project 1 Due 4:30 pm Chp 6 – Stages of Learning	Review PowerPoints, Bb videos and activities to prepare for Test 1	
<b>10/7</b>	Nothing Due – Test 1 released on Bb	Test on Chp 1, 2, 3, 4, 5	Test 1 - 75 pts	
<b>10/14</b>	Fall Break	Work on Test 1 due 10/21	Test 1 due next week	
<b>10/21</b>	Test 1 Due – 75 pts	Chp 7 – Pre-instruction considerations Introduce PROJECT 2 – VIDEO ANALYSIS Due 12/2	Activity 4 & 5 Stages of learning, designing critical elements – 50 pts	
<b>10/28</b>	Activity 4 & 5 Due	Chp 8 – Skill Presentation	Email <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a> confirming that you are aware of Project 2	
<b>11/4</b>	Send Email to <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a> confirming that you are aware of Project 2	Chp 9 – Principles of Practice Design	Activity 6 & 7 – 50 pts assigned	
<b>11/11</b>	Activity 6 & 7 Due	Chp 10 – Practice Schedules	Email <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a> what skill your will be analyzing for Project 2 Activity 8 – 25 pts assigned	
<b>11/18</b>	Activity 8 Due Send an Email to <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a> the skill that you will be analyzing for Project 2	Chp 11- Diagnosing Errors	Work on Project 2	
<b>11/25</b>		Chp 12 – Correcting Errors	Work on Project 2	

<b>12/2</b>	Project 2 Due – 75 pts	Email Project 2 <a href="mailto:nsilvis@gmu.edu">nsilvis@gmu.edu</a>	Organize notes, Powerpoints, Bb videos to prepare for the Final Exam	
<b>12/9 - 12/11</b>	Review for Final & Final Exam released – 75 pts	Reading Days & Final Exam – Review for Final Chp 1-12	Final Due 12/13	

## CEHD Commitments

The College of Education and Human Development is committed to fostering collaboration and community, promoting justice and equity, and advancing research-informed practice. Students are expected to adhere to, and contribute to, these commitments, the CEHD Mission, and Core Values of George Mason University. More information can be found here: <https://cehd.gmu.edu/about/culture/>

## GMU Policies and Resources for Students

### Policies

- Students must adhere to Mason’s Academic Standards (see <https://catalog.gmu.edu/policies/academic-standards/>)
- Students must follow the university policy for Responsible Use of Computing (see <https://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 <https://ds.gmu.edu/>).

- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor. Campus Resources
- Support for submission of assignments to VIA should be directed to [viahelp@gmu.edu](mailto:viahelp@gmu.edu) or <https://cehd.gmu.edu/aero/assessments>.
- Questions or concerns regarding use of your LMS should be directed to:
  - o Blackboard Learn: <https://its.gmu.edu/knowledge-base/blackboard-instructionaltechnology-support-for-students/>
  - o Canvas: <https://its.gmu.edu/service/canvas/>
- For information on student support resources on campus, see: <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>
  - o TimelyCare: <https://caps.gmu.edu/timelycare-services/>
  - o Writing Center: <https://writingcenter.gmu.edu/>

## Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling

and Psychological Services (CAPS) at 703-993- 2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing [titleix@gmu.edu](mailto:titleix@gmu.edu).

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