George Mason University College of Education and Human Development Exercise, Fitness and Health Promotion EFHP 730.001 – Motor Learning 3 Credits, Spring 2019 [Tuesdays/11:00AM – 1:00 PM] [Bull Run Hall Room 212 – Science & Technology Campus]

Faculty

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Prerequisites/Corequisites

Admission to the MS EFHP Program;

University Catalog Course Description

Appraisal of motor learning theories and an analysis of motor skill development including the roles of information processing, practice, feedback, and motivation.

Course Overview

This course involves discussion of the practical application and research potential of motor learning theories and concepts. The course is designed to teach students the advanced principles and concepts of motor learning so they might apply it to their future practice.

Course Delivery Method

This course will be delivered using a seminar format.

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

- 1. Discuss motor learning concepts and theories
- 2. Explain practical applications of motor learning concepts and theories
- 3. Synthesize the role of motor learning concepts and theories including information processing, practice, feedback, and motivation and how they influence motor performance
- 4. Analyze the motor learning literature using an evidence-based approach
- 5. Design intervention plans to apply motor learning concepts to practice

Required Texts

Schmidt and Lee. Motor Control and Learning: A Behavioral Emphasis. Human Kinetics. 6th edition. ISBN-13: 9781492547754

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

- Assignments and Examinations
 - **Examinations**: Students will have <u>1</u> examination during the semester. Questions may include, but not be limited to multiple choice, true-false questions and written short answer essays.
 - **Literature Review:** Students will write a literature review on a topic decided upon by the student and instructor. A synthesis matrix will be submitted with the literature review.
 - **Research Project Proposal:** A written and oral proposal of the project will be required at the mid-point in the semester. Students will receive feedback during the oral presentation prior to submitting the written proposal.
 - **Research Project**: Students will complete a project which will require developing a data collection protocol, collecting data, data analysis, presentation and paper. The project will allow them to apply theory from the course to investigate a specific research question.
 - **Teaching Presentation**: Students will provide <u>1</u> teaching presentations during the semester. The teaching presentation will consist of a 30-minute lecture, activity & discussion. Detailed instructions will be provided to students at the start of the semester.
 - Article Presentation: Students will present <u>2</u> articles to the class during the semester. The article presentations will expose students to past and current research on an overarching topic covered that day in class. Detailed instructions will be provided to students at the start of the semester.
 - **Participation & Professional Behavior:** This portion of the grade will be determined by the course instructor. If you need clarification for the expectations outlined below it is your responsibility to ask at the start of the semester, not after a violation has occurred.
 - Attendance
 - Students are expected to be on time, attend all class meetings and be prepared for in class assignments and projects. Excused absences include the following: illness (must bring a receipt or note from a doctor), family death, athletic/academic event, and others at the discretion of the instructor. For known upcoming absences, students must contact the instructor at least one week in advance to the missed class to make up work. In the case of illness or some other unforeseen absence, the student must contact the instructor via e-mail or telephone. At the next attended class meeting the student will discuss material that is to be completed. It is the student's obligation to pursue any make-up work.
 - Professional Behavior
 - EFHP students are expected to exhibit professional behaviors and dispositions at all times. Depending upon the setting professionalism may appear different, but typically consists of similar components. For EFHP graduate students in a classroom setting, professionalism generally comprises the following

components: attendance, communication, demeanor, responsibility and accountability for actions, and self-awareness.

- Alternate Schedule
 - This course may have professionals from the field as guest speakers. Due to their professional responsibilities, guest speakers may not be able to attend a scheduled class time. Therefore, this course may require meeting outside of regularly scheduled class times and/or travel to sites off campus. Students will be informed of such meetings one week in advance of the scheduled class meeting. Students will be expected to arrange transportation to and from the meeting site.

Academic Load

• Although many students must work to meet living expenses, employment and personal responsibilities are not acceptable reasons for late arrivals, missed classes, or incomplete assignments. Employment must not take priority over academic responsibilities. For additional information on this subject, please see the GMU Academic Catalog

(http://catalog.gmu.edu/content.php?catoid=5&navoid=104#Registration_attendance)

- . Students failing to observe these guidelines should expect no special consideration for academic problems arising from the pressures of employment.
- Honor Code
 - Students are held to the standards of the George Mason University Honor Code (see http://honorcode.gmu.edu for details). Violations, including cheating and plagiarism, will be reported to the Honor Committee. Student assignments may be put through plagiarism detecting software.
- Written Assignments
 - All assignments must be typed in Microsoft Word, and formatted as follows (*unless otherwise specified*): double spaced, 12 point Times New Roman font, 1 inch margins, your name and title in the running header at top left had corner, continuous line numbers on left margin, and page numbers centered in footer. Failure to comply with any or all parts of this format will result in an unacceptable assignment, which corresponds to zero (0) points.
 - Pay close attention to spelling and grammar as these will count towards your grade on written assignments. American Medical Association Manual (AMA) of Style (10th edition) format must be used for all written work in this class (e.g., in referencing, creation of tables, and formatting headers for paper sections).
 - Assignments must be turned in on Blackboard/MyMason Portal by the beginning of class on the specified date due (*unless otherwise specified*). No late assignments will be accepted. It is recommended that students keep copies of all submitted work.

Technology Use During Class

- As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. No sound emitting technology (e.g., cell phones, smart phones, iPads, Tablets, pagers, etc.) is allowed at any time during the class period. Students who are observed using any form of technology inappropriately (e.g., sending text messages from cell phones, visiting social networking sites from laptops, etc) will be dismissed from class for the day, counted as an absence, and not permitted to make up missed assignments. Additionally, no laptop computers (e.g., netbooks, notebooks, etc.) will be permitted for use during class time unless with permission from the instructor.
- E-mail Correspondence

Only messages that originate from a George Mason University address will be accepted. Please address the subject line for all email pertaining to this course as: *EFHP 730: Last Name – purpose of email.* The following is an appropriate professional format:

Subject: EFHP 730: Help with (fill in blank)

Dear Dr. Name (Introductory salutation)

I have a question regarding one of the assignments. (Text body)

Regards, (Ending Salutation)

Mr./Mrs. Student (Your name)

Note: All email will be responded to in the order in which it is received. Students should allow 48 hours for a response.

• Course Performance Evaluation Weighting

The course will be graded on a total of 100 points:		
ASSESSMENT METHOD	POINTS	
Examination	20	
Literature Review	15	
Research Project Proposal	10	
Research Project	30	
Teaching Presentation	10	
Article Presentations	10	
Participation & Professional Behavior	5	
TOTAL	100	

Grading Policies

The student's final letter grade will be earned based on the following scale:

Grade	Percentage
А	94 - 100%
A-	90 - 93%
B+	88 - 89%
В	84 - 87%
B-	80 - 83%
С	70 – 79%
F	0-69%

Note: Although a B- is a satisfactory grade for a course, students must maintain a 3.00 average in their degree program.

Professional Dispositions

See https://cehd.gmu.edu/students/polices-procedures/

Class Schedule

Week	Торіс	Chapter/Assignment Due Date
1 – 1/22	Introduction to Motor Behavior, Motor Learning & Motor Control	Chapter 1 & 2 Articles on Blackboard
2 – 1/29	Motor Learning Concepts and Research Methods	Chapter 9
3 – 2/5	The Learning Process	Chapter 12
4 - 2/12	Conditions of Practice	Chapter 10
5 – 2/19	Augmented Feedback	Chapter 11
6 – 2/26	Retention and Transfer	Chapter 13
7 – 3/5	Research Project Proposals	Literature Review Due
8 - 3/12	Spring Break	
9 – 3/19	Human Information Processing Attention and Performance Intervention Data Collection	Chapter 3 Chapter 4
10 - 3/26	Sensory Contributions to Motor Control Central Contributions to Motor Control Intervention Data Collection	Chapter 5 Chapter 6
11 - 4/2	Principles of Speed & Accuracy Coordination Intervention Data Collection	Chapter 7 Chapter 8
12 – 4/9	Intervention Data Collection	
13 – 4/16	Intervention Data Collection	
14 - 4/23	Clinical & Performance Application of Motor Learning and Control Principles / Special Populations	Chapters/articles assigned by instructor
15 - 4/30	Research Project Presentations	
16 – 5/7	Examination	Final Project Paper Due May 9 at Midnight

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: <u>http://cehd.gmu.edu/values/</u>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see https://catalog.gmu.edu/policies/honor-code-system/ https://catalog.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 <u>tk20help@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/tk20</u>. Questions or concerns regarding use of Blackboard should be directed to <u>http://coursessupport.gmu.edu/</u>.
- For information on student support resources on campus, see <u>https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</u>

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