American Public University System

The Ultimate Advantage is an Educated Mind

Department of Sport and Health Sciences
SPHS 502
Motor Learning
3 hours
8 weeks
Prerequisite(s): None

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Instructor Information

Instructor:
Email:

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Course Description (Catalog)

An evaluation of the physical, physiological, and psychological factors that affect motor skill acquisition, performance, retention, and transfer. With a focus on voluntary movement, topics include nervous system control of movement, sensory and perceptual contributions to motor learning, information processing, optimal conditions for learning motor skills, preferred modes of feedback delivery during learning, and individual variability in motor skill acquisition. Students will apply the principles of motor learning to coaching, fitness, and rehabilitation

settings. Additionally, they will analyze motor learning settings and determine adjustments to be made in those settings to foster motor skill acquisition for a variety of populations.

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Course Scope

This course is designed to evaluate the physical, physiological, and psychological factors that affect motor skill acquisition, performance, retention, and transfer. In addition to numerous illustrations within the text, there are hands-on experiences performed on yourself or a partner to enhance learning. Also, learning experiences include weekly assignments and a final project to further emphasize the material presented. Sample questions are included to help you prepare for testing material learned in each anatomical area covered. On successful completion of the course, you should be able to analyze motor learning settings and determine adjustments to be made in those settings to foster motor skill acquisition for a variety of populations.

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Course Objectives

After successfully completing this course, you will be able to:

1. Assemble all elements of motor learning to include for physical, physiological, and psychological factors that affect motor learning to determine how to facilitate motor skill acquisition in a variety of populations.
2. Analyze motor learning environments to include feedback to determine the ideal conditions to facilitate learning, retention, and transfer of motor skills.
3. Assess current motor learning research and apply that research to current practical exercise science settings.
4. Evaluate the central nervous system factors that are responsible for motor learning, applying the relative contribution of these factors to motor skill acquisition, feedback processing, retention, and transfer of motor skills.
5. Compare and contrast varying practice methods to determine the ideal practice conditions for any sport, fitness, or rehabilitative motor skill.
6. Analyze the principles of speed and accuracy and how Fitt's Law relates to motor learning and performance.

7. Assess the components of motor coordination and how those factors relate to motor learning and performance.

8. Examine the methods of research used to develop the body of literature that composes the field of motor control and learning.

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Course Delivery Method

This course delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. Online assignments are due by Sunday evening of the week as noted and include Discussion Board questions (accomplished in groups through a threaded discussion board), examination, and individual assignments submitted for review by the Faculty Member). Assigned faculty will support the students throughout this eight-week course.

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Course Materials

Required Course Textbooks
Title: Motor Control & Learning – 5th ED
Author: Richard Schmidt & Tim Lee
Publisher: Human Kinetics
ISBN-13: 9780736079617

Required Readings
Weekly required readings are shown in the course eight week outline.

Additional Resources

Your text lists additional websites for you to visit at the end of each chapter. Please take the time to look at those sties once you have completed reading the chapter.

Websites

In addition to the required course texts the following public domain Websites are useful. Please abide by the university's academic honesty policy when using Internet sources as well. Note web site addresses are subject to change.

Site Name	Website URL/Address
American Psychology Association	**www.apa.org**
American Council on Exercise	**www.acefitness.org**
National Strength & Conditioning Association	**www.nsca-lift.org**
American College of Sports Medicine	**www.acsm.org**
IDEA Health & Fitness Association	**www.ideafit.com**

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Evaluation Procedures

Reading Assignments:
As graduate level students I anticipate that you will all read the required text reading weekly. Text reading will be covered in forums and assignments.

Supplemental Readings:
During our course you may be asked to read material outside of your text. This may include original research articles, review articles, or some other website source. These readings will covered in a variety of places, including forums, assignments, and a term paper.

Forum Assignments:
Throughout the course you will write responses to Forum prompts. These responses, also called **Posts**, will involve analyzing readings, comparing and contrasting the views of authors, and critiquing arguments presented by the readings or the class. Posts will be graded for accuracy of interpretation, rigor of argument, and clarity of expression. Unless otherwise noted, the following standards apply. Your initial post must be **300 or more words** in length. Developing conversations with at least **TWO** of your classmates is required as part of your grade for each question. The responses should be at least **200 words** in length. Initial posts should be made by Wednesday of each week. Each Forum is worth 10 points.

Responses and posts should abide by the University Netiquette policy. The purpose of the Forum activities is to expand your learning opportunities by engaging in academic and thought-provoking asynchronous conversation with your classmates and instructor. The instructor's role is to facilitate the learning process by participating in the discussions and moving conversations by promoting an advanced level of inquiry.

Homework Assignments:

Assignments will be evaluated based on the individual grading rubrics provided with each assignment.

Exams/Quizzes:
There are no exams in this course.

Essays:
There will be one set of essay questions to complete over the course. These will be questions that cover the text book reading material.

Term Paper:

The detailed guidelines and grading rubric for the Term Paper are provided with the Term Paper.

Grade Instruments	Points
Assignment 1	**50**
Assignment 2	**50**
Final Essays	**100**
Term Paper	**100**
Forum Week 1	**10**
Forum Week 1_2	**10**
Forum Week 2	**10**
Forum Week 2_2	**10**
Forum Week 3	**10**
Forum Week 3_2	**10**
Forum Week 4	**10**
Forum Week 4_2	**10**
Forum Week 5	**10**
Forum Week 5_2	**10**
Forum Week 6	**10**
Forum Week 6_2	**10**
Forum Week 7	**10**

Forum Week 7_2	**10**
Forum Week 8	**10**
Total	**450**

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8 – Week Course Outline

Please see the Student Handbook to reference the University's grading scale

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Week	Topic	Learning Objectives	Readings	Assignment
1	Evolution of a Field of Study & Methodology for Studying Motor Performance	C08	Text Reading: Chapters 1 & 2	Forum Week 1 Forum Week 1_2 Assignment #1: Research article summaries
2	Human Information Processing & Attention and Performance	CO 4	Text Reading: Chapters 3 & 4	Forum Week 2 Forum Week 2_2 Assignment #2: Research article summary
3	Sensory Contributions to Motor Control & Central Contributions to Motor Control	CO 4	Text Reading: Chapters 5 & 6	Forum Week 3 Forum Week 3_2
4	Principles of Speed and Accuracy & Coordination	CO4 CO6	Text Reading: Chapters 7 & 8	Forum Week 4 Forum Week 4_2

5	Individual Differences and Capabilities	CO7	Text Reading: Chapter 9	Forum Week 5 Forum Week 5_2
6	Motor Learning Concepts and Research Methods & Conditions of Practice	CO3 CO5	Text Reading: Chapters 10 & 11	Forum Week 6 Forum Week 6_2
7	Augmented Feedback & The Learning Process	CO2 CO5	Text Reading: Chapters 12 & 13	Forum Week 7 Forum Week 7_2 Final Essays
8	Retention and Transfer	CO1 CO4	Text Reading: Chapter 14	Forum Week 8 Term Paper Due

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Library Guide

Request a Library Guide for your course (http://apus.libguides.com/index.php)

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. These are specially tailored for academic research at APUS:

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name or navigate by school.
- Course Lib-Guides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g., SOCI111) or class name.

If a guide you need isn't available yet, let us know by emailing the APUS Library: librarian@apus.edu