The University of Texas at Tyler Department of Health and Kinesiology Course Information Fall 2025

Course Title: Human Motor Control and Learning

Course Number: KINE 3331

Co-requisite: Human Motor Control and Learning Laboratory (KINE 3132)

Course Structure & Meeting Times

Date: 08/25/2025 - 12/12/2025

Date & Time: Monday & Wednesday (2:30 pm - 3:55 pm)

Class Room: HPC 2255

Instructor Information

Name and Title: Woohyoung Jeon, Ph.D., Assistant Professor of Health and Kinesiology

Office location: HPC 2245 (inside Lab at HPC 2235)

Email address: wjeon@uttyler.edu

Office hours: Mon & Wed (1:00 pm - 2:30 pm) or by appointment

Textbook (recommended):

Motor Control and Learning-UTT (E-Book)

https://us.humankinetics.com/products/motor-control-and-learning-utt

Course description:

This course is designed to provide students with an understanding of the psychological and some physiological factors involved in performance and learning of motor skills. The foundation of our analysis will be the study of human movement and conditions which affect it. We will experience and discuss both theoretical and experimental evidence of these factors in class. In weekly laboratory sessions students will gain first-hand experience with assessing motor performance and learning. Throughout the semester we will consider applications of motor learning in sport, physical education, and rehabilitation.

Student Learning Objectives: After the full completion of this course the student will be:

- 1. Able to identify/discuss the major concepts related to information processing, attention, motor programs, neural mechanisms, and constraints of motor control.
- 2. Able to apply basic motor learning principles to everyday life and activities.
- 3. Able to illustrate and explain the different stages of skill acquisition.
- 4. Able to discuss and give examples of the different learning styles.
- 5. Able to outline/explain the methods used for developing and implementing a motor learning research project.
- 6. Able to incorporate technology to orally present research related to the field.
- 7. Able to effectively collaborate with others to accomplish assigned tasks.

Assessment and Measurement:

Student performance in this course will be assessed by post lecture quizzes, open book quizzes, and test 1,2,3 as follow:

| Online Post Chapter Quizzes | 10% |
|---|------|
| Short Tests | 10 % |
| Oral Exam 1 & 2 (Neuromuscular Control) | 10 % |
| Test 1 | 20% |
| Test 2 | 25% |
| Test 3 (Final Test) | 25% |
| Total | 100% |

Grading will be based on the following scale (no round-off calculation):

| A | 85% ≥ | |
|---|--------------------|------|
| В | $72\% \le < 85\%$ | |
| C | 60% ≤ < 72% | PASS |
| D | 50% ≤ < 60% | FAIL |
| F | < 50% | |

<u>Canvas Work:</u> All assignments posted in Canvas are meant to be completed by their posted due date. These include quizzes and various other types of assignments. You will need to *be prepared* for each class meeting by completing that week's online work ahead of time. I will communicate with you through Canvas (using Email, on Modules, and Announcements) to help keep you on schedule throughout the semester.

KINE 3331 Course Schedule

| Date | Topic | Textbook Chapter | | |
|-------|--|------------------|--|--|
| | PART 1: MOTOR LEARNING | | | |
| 8/25 | Introduction to Motor Learning (ML) | | | |
| 8/27 | Perception and Reaction | ML (Chapter 2) | | |
| 9/1 | *NO Class: Labor Day | | | |
| 9/3 | Attention and Performance | ML (Chapter 3) | | |
| 9/8 | Short Test: Motor Learning 1 (Online Test) | ML (Chapter 5) | | |
| 9/10 | Motor Programs | ML (Chapter 6) | | |
| 9/15 | Stages of Learning & Design Effective Practice Method | | | |
| 9/17 | Performance Indicator and Skill Presentation | | | |
| 9/22 | Short Test: Motor Learning 2 (Online Test) | | | |
| 9/24 | TEST 1 (Motor Learning) | | | |
| | PART 2: MOTOR CONTROL | | | |
| 9/29 | Neuromuscular Control Mechanisms: 1-1 | NCM (Chapter 5) | | |
| 10/1 | Neuromuscular Control Mechanisms: 1-2 | NCM (Chapter 6) | | |
| 10/6 | Short Test: Neuromuscular Control Mechanisms 1 (Online Test) | | | |
| 10/8 | NCM section 1 Oral TEST | Group 1 − 5 | | |
| 10/13 | NCM section 1 Oral TEST | Group 6 – 10 | | |
| 10/15 | Neuromuscular Control Mechanisms: 2-1 | NCM (Chapter 7) | | |
| 10/20 | Neuromuscular Control Mechanisms: 2-2 | NCM (Chapter 8) | | |
| 10/22 | Short Test: Neuromuscular Control Mechanisms 2 (Online Test) | | | |
| 10/27 | NCM section 2 Oral TEST | Group 1 − 5 | | |
| 10/29 | NCM section 2 Oral TEST | Group 6 – 10 | | |
| 11/3 | TEST 2 review | | | |
| 11/5 | TEST 2 (NCM section 1 & 2) | | | |
| 11/10 | Neuromuscular Control Mechanisms: 3-1 | NCM (Chapter 9) | | |

| 11/12 | Neuromuscular Control Mechanisms: 3-2 | NCM (Chapter 16, 17) |
|-------|--|----------------------|
| 11/17 | Short Test: Neuromuscular Control Mechanisms 3 (Online Test) | |
| 11/19 | *NO Class: Conference | |
| 11/24 | *NO Class: Thanksgiving holidays | |
| 11/26 | *NO Class: Thanksgiving holidays | |
| 12/1 | Final Test Review | |
| 12/3 | Individual Review Session | |
| 12/8 | Final TEST | |
| | (cumulative: Motor Learning + NCM) | |

Course Policies and Expectations:

<u>Professionalism:</u> Students are expected to <u>arrive on time for class</u>. It is expected that students will display a professional attitude at all times, including being attentive during lectures and being respectful to the instructor and fellow classmates. <u>No cell phone use during lecture!</u>

<u>Attendance:</u> Students are expected to attend all classes and are responsible for any material missed. Your success in this class will depend on your attendance and the effort you put forth, both online and in person.

<u>Missed class</u>: Students who miss class, regardless of the reason, are expected to take the initiative to obtain notes and/or homework from a fellow student who attended that class.

<u>Make-up:</u> All online assignments have firm due dates. You'll have access to these for at least three days prior to the due date. Any work turned in after the deadline will receive a **zero** for a grade. <u>If you need a make-up for personal reasons</u>, contact me at least a week before. I will work with you to make appropriate arrangements.

<u>Classroom Accommodations</u>: The University of Texas at Tyler provides, upon request, appropriate academic accommodations for qualified students with disabilities. For more information, contact Disability Services Office at 903-566-7079 or https://www.uttyler.edu/disability-services/request/. If this office certifies your need, I will work with you to make all appropriate arrangements.

Learner Support:

The University of Texas at Tyler provides institutional support services essential to learner success.

<u>Student Resources for Hybrid and Online Courses</u> is available for technical support. <u>Student accessibility and resources</u> are available through The UT Tyler Office of Student Accessibility and Resources (SAR). The office provides students equal access to all educational, social, and co-curricular programs through coordination of services and reasonable accommodations, consultation and advocacy.

<u>UT Tyler PASS Tutoring Center</u> (University Center, 3114) is a free walk-in tutoring center, with an individual appointment option, for current UT Tyler students. Currently support for 20 courses is being offered in a variety of subjects.

Student

<u>UT Tyler Student Services</u> provides support and opportunities that maximize a student's ability to benefit from the academic environment through accessibility, professional counseling, recovery, wellness and testing services. The support services encourage personal responsibility and healthy decision-making that contribute to lifelong learning.

Artificial Intelligence Statement

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy. *Refer to the About This Course section of the UT Tyler Syllabus Module for specific information on appropriate use of AI in your course(s)*.

Academic Integrity

"Academic Dishonesty" includes, but is not limited to: cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable (in whole or in part) to another person without giving sufficient credit, taking an examination for another person, falsifying academic records, and any act designed to take unfair academic advantage by the student (such as, but not limited to: submission of essentially the same written assignment for two courses without the prior permission of the instructor, providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or assignment), or the attempt to commit such acts.