# Advanced Motor Learning and Performance

**Lecture Instructor:** Matthew W. Miller, Ph. D.

**Email:** mwm0024@auburn.edu

**Virtual Office Hours (when I will be in my Zoom Office Hours Meeting):**

Wednesday 12 – 2 PM and by appointment (Meeting ID: 961 6358 4336, Passcode: KINE164)

**Office Location**:Kinesiology Building 164

**Meeting:** Tuesday and Thursday 2:00 – 3:15 PM, SAC 253 or Zoom (Meeting ID: 987 8042 9040, Passcode: KINE7650). All class meetings will be recorded and the links to the recordings will be posted on Canvas under Files. This is a Hyflex class, meaning that you can attend the class face-to-face, watch the class live, or watch a recording of the class.

**Credit Hours:** 3.000

**Texts/Resources:** Textbook: Hodges, N. J., & Williams, A. M. (Eds.). *Skill Acquisition in Sport: Research, Theory and Practice* (2nd ed.). New York: Oxford University Press. ISBN 13: 9780415607865. The chapters relevant to the class will be uploaded to Canvas, so you do not need to purchase the book.

Other Readings: The textbook will be supplemented with mandatory journal article readings posted on Canvas.

**Course Description:** Theories, experimental studies, and current issues in the acquisition, performance, and retention of motor skills.

**Learning Outcomes:** Students will become familiar with the current state of theories related to motor learning and performance, and students will be able to critically evaluate these theories.

**Course Content (*DATES ARE SUBJECT TO CHANGE*)**

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| --- | --- | --- | --- |
| Week | Topic | Readings | Assessments |
| 08/17 – 21 | Introduction to Class  Motor Learning Research Methods | Kantak & Winstein (2012) | Kantak & Winstein Quiz |
| 08/24 – 28 | Motor Learning Research Methods  Presenting Information | Lohse, Buchanan, & Miller (2016)  Chapter 1 | Lohse et al. Quiz  Chapter 1 Quiz |
| 08/31 –09/04 | Presenting Information | Chapter 2  Kardas & O’Brien (2018) | Chapter 2 Quiz  Kardas & O’Brien Quiz |
| 09/07 – 11 | Presenting Information | Chapter 3  Beilock, Carr, MacMahon, & Starkes (2002) | Chapter 3 Quiz  Beilock et al. Quiz |
| 09/14 – 18 | Presenting Information  Optimizing Practice Conditions | Chapter 4  Daou et al. (2019) | Chapter 4 Quiz  Daou et al. Quiz |
| 09/21 – 25 | Optimizing Practice Conditions | Chapter 5  Chapter 6 | Chapter 5 Quiz  Chapter 6 Quiz |
| 09/28 – 10/02 | Optimizing Practice Conditions | Chapter 9  Gray (2018) | Chapter 9 Quiz  Gray Quiz |
| 10/05 – 09  No Class 10/08 | Midterm Review |  | Midterm Exam |
| 10/12 – 16 | Issues in Motor Learning | Chapter 10  Chapter 11 | Chapter 10 Quiz  Chapter 11 Quiz |
| 10/19 – 23 | Issues in Motor Learning | Reinforcement Learning Chapter  Abe et al. (2011) | Reinforcement Learning Chapter Quiz  Abe et al. Quiz |
| 10/26 – 30 | Issues in Motor Learning  Skilled Performance | Chapter 14  Chapter 15 | Chapter 14 Quiz  Chapter 15 Quiz |
| 11/02 – 06 | Skilled Performance | Chapter 17  Mishra, Zinni, Bavelier, & Hillyard (2011) | Chapter 17 Quiz  Mishra et al. Quiz |
| 11/09 – 13 | Skilled Performance | Chapter 18  Aglioti, Cesari, Romani, & Urgesi (2008) | Chapter 18 Quiz  Aglioti et al. Quiz |
| 11/16 – 20 | Research, Theory, and Practice: Challenges and Solutions  Conclusion | Chapters 20 – 21 | Chapters 20 – 21 Quizzes |
| 11/23 – 30 No Class 11/26 |  | Make-Up Day or No Class |  |
| Final Exam |  |  | 12/04: Final Exam |

**Assessments:**

Exams

There will a midterm and final exam, which will ask questions related to material covered after the midterm. Exams will be completed through Canvas and are open source with the exception that you cannot consult with another person. Allowable sources include the textbook, journal articles, lecture notes, and the internet. However, what I say during lecture should be considered correct information and will override other sources of information. The exams will be weighted based on the number of questions they contain (i.e., if the midterm contains 50 questions, and the final contains 55 questions, then they will be worth 50 and 55 points, respectively). The time limit for the midterm and final will be 2 hours and 30 minutes, and they will be due by 11:59 PM the day indicated on the schedule. If you do not complete an exam by the due date for ‘unexcused reasons,’ then you may not have the opportunity to complete the exam and, thus, could receive a grade of zero.

Quizzes

There will be 25 quizzes. All quizzes will be completed through Canvas and are open source with the exception that you cannot consult with another person. The purpose of the quizzes is to ensure that students are completing their reading assignments before the class meeting about each reading. Therefore, the quizzes are due the night before the class meeting related to the reading. Allowable sources include the textbook, journal articles, and the internet. However, what the reading (textbook or journal article) states should be considered correct information and will override other information. The quizzes will be 5 questions and be worth 5 points each. The time limit for the quizzes will be 7 minutes. All quizzes will be due by 11:59 PM the day indicated on the schedule. If you do not complete a quiz by the due date for ‘unexcused reasons,’ then you may not have the opportunity to complete the quiz and, thus, could receive a grade of zero.

**Grading:**

Assessments contribute as follows to final class grade:

Exams: 50%

Quizzes: 50%

Percentages will be associated with the following letter grades:

A: 90.0% ≤

B: 80.0% ≤

C: 70.0% ≤

D: 60.0% ≤

F: 60.0% >

**COVID-Related Policies:**

Statement on COVID-19 Physical Distancing

Face coverings are not a substitute for physical distancing. Students shall observe physical distancing guidelines where possible in the classroom, laboratory, studio, creative space setting and in public spaces.

Students should avoid congregating around doorways before or after class sessions. If the instructional space has designated entrance and exit doors students are required to use them. Students should exit the instructional space immediately after the end of instruction to help ensure social distancing and allow for the persons attending the next scheduled class session to enter.

Face Covering Policy

In response to COVID-19, and in alignment with Auburn University's Presidential directives, and local, state, and national health official guidelines face coverings are required at all times while on campus, except when alone in a private office. This includes the classroom, laboratory, studio, creative space, or any type of in-person instructional activity, and public spaces. "A “face covering” is defined as a “covering that fully covers a person’s nose and mouth, including without limitation, cloth face mask, surgical mask, towels, scarves, and bandanas.

If a student has a medical exception to the face covering requirement, please contact the Office of Accessibility to obtain appropriate documentation.

Possibility of Going Remote

In the event that the University is forced to move to fully online instruction, please be assured that the learning goals and outcomes of the course will not change; however, some aspects of the course will change in terms of the mode of delivery, participation, and testing methods. Those details will be shared via a Canvas Announcement within 24 hours of the announcement that we are going remote. Please be prepared for this contingency by ensure that you have access to a computer and Internet.

Assignments/Schedule Subject to Change due to Pandemic

The course schedule and assignments are designed with the most up-to-date information and policies in mind. If the situation changes I will make every effort to keep the schedule as consistent as possible; however, please note that the due dates for assignments and tests may be changed during the semester in response to the changing health and safety requirements or policies of the University. When changes are made, they will be communicated via Canvas Announcement, Canvas message, and all assignment due dates will be updated.

In the Event a Student in Class Tests Positive

Students must conduct daily health checks in accordance with [CDC guidelines.](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html)Students testing positive for COVID-19, exhibiting COVID-19 symptoms or who have been in direct contact with someone testing positive for COVID-19 will not be allowed to attend in-person instructional activities and must leave the venue immediately. Students should contact the [Student Health Center](https://cws.auburn.edu/aumc/)or their health care provider to receive care and who can provide the latest direction on quarantine and self-isolation. Contact your instructor immediately to make instructional and learning arrangements.

In the Event That I Test Positive or Am Required to Quarantine

If I am unable to attend our F2F portions of the class, we will transition to a fully online course until I am allowed to return. If I become ill or unable to lead the class, a backup instructor will be identified and they will communicate any changes or updates to the course schedule or mode of instruction as soon as possible.

Zoom Policies

When we meet on Zoom, your attendance, attention, and participation are expected. Zoom participation requires you to keep your video on and your microphone muted when you are not speaking. Although you may be participating from your domicile, our Zoom meetings are professional interactions. You should dress and behave as you would in a normal F2F classroom. To the extent possible, please minimize distractions in the background. I reserve the right to dismiss anyone from a Zoom meeting whose environment or behavior is distracting or problematic. If you have any issues with sharing your video feed, adhering to this policy, or anything else related to your use of Zoom please notify me via email in the first week of class. I’m happy to consider and provide accommodations, but you will need to be in communication with me.

Attendance

Your health and safety, and the health and safety of your peers, are my top priorities. If you are experiencing any symptoms of COVID-19, or if you discover that you have been in close contact with others who have symptoms or who have tested positive, you should not attend in-person classes. You will not be penalized for such an absence nor will you be asked to provide formal documentation from a healthcare provider. My hope is that if you are feeling ill or if you have been exposed to someone with the virus, you will stay home to protect others. I don’t want the need for documentation to discourage you from self-isolating when you are experiencing symptoms.

Please do the following in the event of an illness or COVID-related absence:

* Notify me in advance of your absence if possible
* Keep up with coursework as much as possible
* Participate in class activities and submit assignments electronically as much as possible
* Notify me if you require a modification to the deadline of an assignment or exam

Finally, if remaining in a class and fulfilling the necessary requirements becomes impossible due to illness or other COVID-related issues, please let me know as soon as possible so we can discuss your options.

**Class Policies:**

Attendance: Although attendance is not required, students are expected to attend all classes, and will be held responsible for any content covered in the event of an absence.

Excused Absences: Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for university classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from class for any other reason must contact Dr. Miller in advance of the absence to request permission. Dr. Miller will weigh the merits of the request and render a decision. When feasible, the student must notify Dr. Miller prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please see the *Tiger Cub* for more information on excused absences.

Make-Up Policy: Students are only guaranteed the opportunity to make up assignments due to excused absences (i.e., students are not guaranteed the opportunity to make up assignments due to unexcused absences). Arrangement to make up assignments due to properly authorized excused absences must be initiated by the student within one week of the end of the period of the excused absences(s). Except in unusual circumstances, such as the continued absence of the student or the advent of university holidays, a make-up assignment will take place within two weeks of the date that the student initiates arrangements for it.

Academic Honesty Policy: All portions of the Auburn University student academic honesty code (Title XII) found in the *Tiger Cub* will apply to KINE 7750. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

Disability Accommodations: Students who need special accommodations in class, as provided by the Americans with Disabilities Act, should arrange for a confidential meeting with Dr. Miller during office hours in the first week of classes (or as soon as possible if accommodations are needed immediately). The student must bring a copy of their Accommodations Letter and an Instructor Verification Form to the meeting. If the student does not have these forms, they should make an appointment with the Program for Students with Disabilities, 1288 Haley Center, 844-2096 (V/TT).

Course Contingency: If normal class is disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course.

Professionalism: As faculty, staff, and students interact in professional settings, we are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below:

* Engage in responsible and ethical professional practices
* Contribute to collaborative learning communities
* Demonstrate a commitment to diversity
* Model and nurture intellectual vitality