

# Motor Learning

## KIN 166

Fall 2025 Section 01 Hybrid 3 Unit(s) 08/20/2025 to 12/08/2025 Modified 08/19/2025

### Contact Information

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Instructor	Emily H. Wughalter, Ed.D.
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<b>Lecture Class Days/Time and Lab Classes Days/Times</b>	<p><b>Lecture Section 1</b></p> <p>The lecture is scheduled for Mondays and Wednesdays from 9:00 to 9:50 am. For the entire semester, the Wednesday lecture schedule is fully asynchronous with a set of activities to complete prior to returning for the in person Monday lecture held in YUH 124 unless otherwise notified.</p> <p><b>Laboratory Sections 2, 3, 4, and 5</b></p> <p>Laboratories are taught by Jordan Yamiguez (Jordan.Yamat@sjsu.edu). As well, the laboratories are scheduled in hybrid mode. The <i>Motor Learning Lab Portfolio</i> provides a calendar of synchronous and asynchronous labs. When in person the labs are scheduled in SPX 172, The Applied Motor Behavior Lab. Attend only the laboratory assigned by your enrollment in Kin 166.</p> <p>(Lab A) Laboratory Section 2, Mondays, 10:00 to 11:50 am</p> <p>(Lab B) Laboratory Section 3, Mondays, 12:00 to 1:50 pm</p> <p>(Lab C) Laboratory Section 4, Wednesdays, 10:00 to 11:50 am</p> <p>(Lab D) Laboratory Section 5, Wednesdays, 12:00 to 1:50 pm</p>

# Dr. Emily Wughalter

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## Office Hours

Mondays, 12:00 to 1:00 pm; Tuesdays, 2:45 to 3:45 pm; hours arranged

Office hours will be held in fall 2025 on Mondays from 12:00 to 1:00 pm; Tuesdays, 2:45 to 3:45 pm; and hours arranged. All office hours will be held through Zoom in my personal meeting room. You must use your SJSU email address to access these Zoom meetings. Emily Wughalter's Personal Meeting Room can be joined from a PC, Mac, Linux, iOS or Android at <https://sjsu.zoom.us/j/9693123321>.

## Course Description and Requisites

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Concepts, principles and theories of motor learning with application to physical activities.

*Misc/Lab: Lecture 2 hours/lab 2 hours.*

**Prerequisite(s):** KIN 70 for majors/minors only or instructor consent; BIOL 66 with a grade of 'C-' or better.

**Grading:** Letter Graded

## Classroom Protocols

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Students are expected to be courteous during class. Any student engaging in disruptive behavior will be asked to leave the virtual Zoom or the classroom when in person.

## Program Information

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**Mission** - In an atmosphere of social justice, equity, and respect for diversity, the mission of the Department of Kinesiology is to create and disseminate knowledge; engage in community service; prepare and graduate exemplary kinesiology professionals; as well as meet individual and societal needs for physical activity, sport, movement, and wellness.

**PLOs** - Upon completion of a Bachelor of Science degree program in the Department of Kinesiology students will be able to:

- Explain, identify, and/or demonstrate the theoretical and/or scientific principles that can be used to address issues or problems in the sub-disciplines in kinesiology.
- Effectively communicate in writing (clear, concise and coherent) on topics in kinesiology.
- Effectively communicate through an oral presentation (clear, concise and coherent) on topics in kinesiology.

- Utilize their experiences across a variety of health related and skill-based activities to inform their scholarship and practice in the sub disciplines in kinesiology.
- Identify and analyze social justice and equity issues related to kinesiology for diverse populations.

## Course Goals

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Upon successful completion of the course the students will be able to:

- Explain the relevance of the body of knowledge (concepts, principles, and theories) in motor learning and its fit with interpreting movement and physical activity (G1)
- Use technologies and learning strategies for deeper learning of motor learning (G2)
- Draw interdisciplinary connections with motor learning and other subdisciplines in the field of kinesiology and human sciences (G3)
- Apply knowledge of motor learning in practice of kinesiology, health, and human sciences (G4)
- Organize information so that it fits with the core understanding of kinesiology (G5)
- Create an atmosphere that is open to and accessible for all students (G6)

## Course Learning Outcomes (CLOs)

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Upon successful completion of this course students will be able to:

- Explain in writing on a narrowly focused and significant topic identified in the scholarly discipline of motor learning (CLO1)
  - Specifically, an essay integrating primary and scholarly source materials demonstrating how narrowly and deeply you understand the complexity of human performance and learning using an information processing and dynamic systems analysis. Through this critical lens and by implementing interpretation strategies you will learn to recognize theoretical and scientific knowledge in the motor learning literature.
- Explain orally on a significant topic narrowly identified in the scholarly discipline of motor learning (CLO2)
  - Specifically, the team presentation as well other oral contributions, will be required throughout team building activities. By addressing the different laboratory class activities, you will discover motor learning and its principles, determine what you understand, and recognize where you still need practice.
- Solve hypothetical problems by making applications of motor learning theoretical and empirical knowledge to practice as teachers, developers, managers, and rehabilitation specialists (CLO3)
  - Specifically, by responding to reflective items presented in the *Motor Learning Laboratory Portfolio* and through the lab weekly reflection assignments posted on Canvas you will be given multiple hypothetical problems to solve. The final *Motor Learning Laboratory Portfolio* will be assessed at the end of the semester. Reflections are due as presented in the assignment guidelines for the reflection.
- Describe concepts, principles and theories of motor learning in the context of kinesiology (CLO4)
  - Specifically, two regularly scheduled exams and five pop quizzes in lecture class will measure through reflections as well as multiple choice and true/false items, your understanding of motor

learning concepts, principles, and theories. Further, reflections required in the *Motor Learning Lab Portfolio* are expected to assist students' integration of motor learning into the field of kinesiology.

- Explain how recognizing bias in science is a form of social justice (CLO5)
  - Specifically, the idea of social justice will be addressed by applying a critical analysis of the literature that will be measured by at least one item on one of two exams.
- Demonstrate use of technology in motor learning (CLO6)
  - Specifically, all activities require the use of a computer and interaction with Canvas resources. As well the scholarly information will be garnered from the scholarly databases. Your participation in experiments will use technology and computers to conduct, analyze, and present results of scientific data all demonstrating your integration of technology in the discipline

## Canvas and MYSJSU Messaging

Course materials such as the course syllabus, major assignment handouts, and course lecture slides can be found on Canvas, the content management system we use at SJSU. All materials will be linked to the Modules page organized by topic and week. From the SJSU home page you can easily find the Canvas entry page. Your SJSU ID # and password will interface your SJSUOne Account and all others at SJSU called your SJSU One Account. Upon first arriving on your Canvas home page, be sure to set your email to your assigned SJSU e-mail account ([firstname.lastname@sjsu.edu](mailto:firstname.lastname@sjsu.edu)). You must have your SJSU email attached to Canvas to access any live Zoom sessions. All announcements for our class will be posted on Canvas; be sure to check on a regular basis. Moreover, check your SJSU messaging or other communication system as indicated by your instructors.

## Technology Intensive, Hybrid, and Online Courses

The Kin 166 lectures and laboratories are delivered in a hybrid format that is technology intensive. For the lecture (Kin 166, Section 1), you will find your Wednesday lecture is asynchronous including a variety of activities such as a recorded video in YouTube or MP4 format and available as a link on the Canvas Modules page under the specific module. The modules page will populate with each class. Asynchronous work will be posted no later than 9:00 am on Wednesdays. As our course is ordered such that each lecture is dependent on the one before, the asynchronous lectures should be viewed within the 48 hours prior to the following in person lecture on Mondays as noted in the calendar at the end of this syllabus. The *Motor Learning* class requires computer and Internet access for the lecture and lab components of the class. Every class (lecture and lab) will be associated with a set of PowerPoint slides that may serve as a base for more in depth note taking. Use your own personal note taking systems for elaborating on the information provided in the slides and various other materials provided. In the laboratory portion of the class several new technologies will be implemented. For example, applications such as Google docs will allow us to reach each other synchronously even in remote locations facilitating success with team activities; as well, asynchronous editing is possible and can be recommended by team members. Several long term options for obtaining laptops are available to students on campus and should be sought out in the Instructional Resource Center (IRC) or the Martin Luther King Jr. Library.

# Motor Learning and Control

**Author:** Richard Magill and David Anderson

**Publisher:** McGraw Hill

**Edition:** 12

**Availability:** Campus Bookstore

Magill, R. & Anderson, D. (2021). *Motor Learning and Control* (12<sup>th</sup> edition). McGraw Hill: NY.

## Lab Materials

Wughalter, E.H. (2025, revised). *The Motor Learning Lab Portfolio*. Access is available from Canvas page.

The beginning template for the *Motor Learning Lab Portfolio* is available for downloading on the Canvas shell for our lecture and our lab sections on the Modules page under the **Start Here Module**. To successfully complete this laboratory portfolio assignment, you may print out the template and hand write your answers to items posed each week or you may opt to maintain a fully electronic portfolio only. Regardless of your process, an electronic portfolio should be developed throughout the semester and submitted through Canvas.

## Library Liason

Adriana Poo is our library liaison. She can be reached at: [Adriana.poo@sjsu.edu](mailto:Adriana.poo@sjsu.edu) or by phone (408) 808-2019.

## Kinesiology Diversity Statement

The Department of Kinesiology is committed to developing and implementing equitable curricula and teaching practices that reflect the diversity of our student body and departmental core values. The faculty strives to foster an inclusive learning environment where all students feel valued, supported, welcomed, and empowered to succeed in ALL classes. All students, inclusive of all, but not limited to ethnicities, socioeconomic and cultural backgrounds, gender identities and expressions, castes, religions, ages, sexual orientations, abilities, bodies, political affiliations, statuses, and nationalities, are encouraged to share their rich array of perspectives and experiences. KIN department faculty, staff, and students all have something of value to contribute. Everyone is expected to respect differences and demonstrate diligence in understanding how others' perspectives, behaviors, and views may be different from theirs.

Student Activity	Due Date	Points	Points
		Possible	Earned
Midterm*	October 6	15	
Final*	December 15	25	
Short Essay (includes preparation in lab class)**	November 24	10	
Laboratory Grade includes:		40	
· Submission of 5 weekly lab assignments (2 point each)***	Assigned	(10)	
· Submission of lab portfolio ****	December 12	(25)	
· Presentation of team project *****	December 8	(5)	
Pop Quizzes***** (10 Discussions in class and/or on-line)	Assigned	10	
Total Points		100	

## Assignment Explanations

Where necessary, rubrics for Portfolio and short essay are provided. All assignments with the exception of lab reflections are due at 11:59 pm on the dates noted.

\* **Midterm and Final Exams** include content discussed in class, online, in assigned readings (such as discussion threads, textbook readings, and podcasts), and from the motor learning laboratories. Tests will consist of multiple choice and true/false items covering your motor learning knowledge. The midterm, scheduled for October 6 will be constructed to test short term information, while the final will be constructed to be comprehensive. The midterm will be administered in person during the time of the regularly scheduled 50 minute lecture class. The final will be administered in class according to the university Schedule of Classes for Thursday, December 15 from 8:30 to 10:30 am (please see final exam schedule and mark your calendars accordingly). No exceptions will be made from taking exams on the assigned test dates. Times and dates will be changed only for serious and compelling reasons.

**\*\*One at home short essay** will be assigned in class to be completed through a combination of the lab experiences and at home. The essay development must be supported by a minimum of three articles from the *primary and scholarly* literature. Late essays (see Short Essay Assignment Guidelines posted on Canvas on the Modules page under Assignments) will only be accepted for serious and compelling reasons. The short essay must be prepared electronically and submitted as either a Word or PDF document, or it will not be accepted. The best supported submission file type is PDF as this type of document maintains its formatting across platforms. In your essay attempt making application of the knowledge gained to your emphasis of study, e.g., adapted physical education, teaching physical education, movement science, or athletic training. For example, a student in adapted physical education might examine how certain tasks can be redesigned or shifted according to Gentile's taxonomy to adapt performance for a person with a disability; an athletic trainer might discuss the progression of reacquainting a client with skills according to Gentile's work; a physical education teacher might define how to schedule of practice for people with special needs and abilities; a strength and conditioning trainer might consider the order of muscular work and how feedback might be provided to maximize a client's skills. The essay will be submitted electronically on the date assigned, November 24 at 11:59 pm. You will find a drop box on Canvas on the Assignments Page or linked through the Modules page. A draft of the grading rubric for the at home Short Essay can be found at the end of the assignment guidelines.

**\*\*\*Weekly lab reflection assignments** will be collected across 5 weeks. The reflection assignment on Canvas will provide detail about due dates. Each of these assignments is worth 2 points for a total of 10 points. The following mini-rubric will be used to score the weekly lab reflections.

- 2 points means the reflection is thoughtful in response to the prompt and is clearly and concisely written
- 1 point means the reflection is submitted but is not clearly related to the topic presented nor is it clearly and concisely written
- 0 means the reflection is not submitted

**\*\*\*\*A completed electronic *Motor Learning Lab Portfolio*** is due on December 12 by 11:59 pm. When late the *Motor Learning Lab Portfolio* will not be accepted except for serious and compelling reasons. Within each lab students will be assigned to a team for working cooperatively throughout the semester; the team will create a project with an oral presentation on a topic assigned by the professor. Technology is required for the presentation that includes either the development of an organized and meaningful podcast or a PowerPoint presentation to deliver the topic to an audience. Teams will be assigned by the professor. Teams may communicate either virtually through Google docs or Zoom, or in person to complete team assignments. A draft grading rubric for the project is available in *Motor Learning Lab Portfolio*.

**\*\*\*\*\*Ten pop quizzes** will be given either in the asynchronous or synchronous lectures; they are not announced in advance. They will be given live or online in lecture class for 1 point each. A maximum of 10 points can be earned for pop quizzes. Make up pop quizzes are not allowed under any circumstances. Pop quizzes can be accessed online through Canvas for the lecture either in the discussion or assignments tab for our lecture Canvas page. Here students will be queried about topics discussed in class.

All exams must be taken, and all assignments must be submitted; otherwise, you will earn 0 points for that assignment. The Final Exam will be on Thursday, December 15 from 8:30 to 10:30 am so organize your calendars now.

## ✓ Grading Information

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Points Earned	Grade Assigned
100	A+
93 to 99.99	A
90 to 92.99	A-
88 to 89.99	B+
84 to 87.99	B
80 to 83.99	B-
78 to 79.99	C+
74 to 77.99	C
70 to 73.99	C-
This course must be passed with a C- or better to be used as a Kinesiology major requirement.	
68 to 69.99	D+
64 to 67.99	D
60 to 63.99	D-
↓ 59.99	F



# University Policies

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Per [University Policy S16-9 \(PDF\)](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the [Syllabus Information](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) (<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>) web page. Make sure to visit this page to review and be aware of these university policies and resources.

## Course Schedule

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### Hybrid Kin 166/ Motor Learning Lecture Calendar, Fall 2025

In person (YUH 124; 9:00 to 9:50 am)  
Monday lectures; virtual asynchronous  
Wednesday lectures

August 20	Start Here: Syllabus and Course Expectations
August 25	Introduction to Motor Learning
August 27	Motor Learning and Kinesiology: Principles and Concepts
September 1	NO CLASS - LABOR DAY
September 3	Introduction to Classification Systems
September 8	Gentile's Taxonomy of Motor Skills
September 10	Gentile's Taxonomy of Motor Skills
September 15	Gentile's Taxonomy of Motor Skills; Diversity of Movement Patterns

September 17	Complex Approaches in Gentile's Theory
September 22	Introduction to Information Processing
September 24	Information Processing: Perception
September 29	Signal Detection
October 1	Wrap-up for Midterm
October 6	Midterm
October 8	Review from Midterm
October 13	Information Processing: Decision
October 15	Ideas about Memory
October 20	Information Processing: Action
October 22	Cognitive Processing and Motor Control View Contrasts
October 27	Motor Control Theories and Hypotheses
October 29	Introduction to Dynamic System
November 3	Understanding Dynamic Systems
November 5	Applying Dynamic systems
November 10	Introduction to Schema Theory
November 12	Schmidt's Schema Theory
November 17	Introduction to Memory Research

November 19	Levels of Processing in Memory
November 24	Introduction to Contextual Interference Theory  Short Essay Due
November 26	Contextual Interference Applications
December 1	Optimal Theory
December 3	Optimal Theory
December 8	Motor Learning Wrap Up
	<p>Submission of Team Project by December 8</p> <p>Submission of Motor Learning Lab Portfolio Monday, December 12</p> <p>Motor Learning Final exam, Monday, December 15 from 8:30 to 10:30 am as scheduled by the university schedule of classes.</p> <p>If necessary, students with special accommodations should contact the professor directly. and privately via email or on Canvas  <a href="mailto:Emily.Wughalter@sjsu.edu">Emily.Wughalter@sjsu.edu</a> </p>