WAYNE STATE UNIVERSITY
COLLEGE OF EDUCATION

**Division:** Kinesiology, Health, and Sport Studies
**Program Area:** Kinesiology
**Course Ref. #:** 17122
**Course Title:** KIN 3550 - Motor Learning & Control
**Section #:** 002 **Credit Hours:** 3
**Term/Year:** Fall 2016
**Course Location:** 0129 Main
**Day:** Wednesday **Time:** 11:45 AM – 2:30 PM
**Instructor:** Alicia Jones MOT, OTR/L
**Office Address:** 10 Main Annex
**Office Hours:** W: 9:00 AM – 11:30 AM; Th: 3:00 PM – 5:30 PM
**Office Phone #:** 313-577-4246
**e-mail:** ax1387@wayne.edu **Website:** http://coe.wayne.edu/kinesiology/index.php

**Course Description:**

The study of motor skill acquisition and motor control with applications to physical activity. Focus on the cognitive processes and neural mechanisms that contribute to motor learning and control.

**Course Outcomes:**

Upon the completion of this course, students should be able to:

1. Demonstrate an understanding of human nervous system functions on motor behavior.
1. Demonstrate an understanding of human motor control theory and application.
2. Demonstrate an understanding of human memory theory on motor behavior.
3. Demonstrate an understanding of the principles of motor control.
4. Demonstrate an understanding of the variables optimizing motor skill acquisition, retention, and transfer.
5. Develop a skill of motor control and learning lab.
6. Develop a skill of the computation and presentation of scientific data.
7. Develop the problem solution and writing skill through reviewing scientific research.

**Required Text:**

Magill, RA (2013). *Motor learning and Control: Concepts and Applications (10th ed.).* New York: McGraw Hill. ISBN: 978-0-07-802267-8

**Additional References:**

Lai, Q., Shea, C. H., Wulf, G., & Wright, D. L. (2000). Optimizing generalized motor program and parameter learning. *Research Quarterly for Exercise and Sport, 71,* 10-24.

Schmidt, R.A., & Wisberg, C.A. (2007). *Motor learning and performance (4th ed.)* Champaign, IL: Human Kinetics.

Textbook website: www.mhhe.com/magill10e

**Course Assignments:**
Two in class labs and a research assignment are required for the class. The labs will involve group discussions, testing measures/assessments used in the motor control field, and in class research. Your participation and lab report will be used to determine your grades on the labs.
***You must be present for the lab in order to receive full credit.***
The research assignment will involve a critical review on current research topics in motor control and learning. The grading of the research will focus on the completion and quality of your review paper.

**Course Examinations:**
Two exams will be scheduled during the semester. Each exam will consist of objective questions and essay questions. Six quizzes will be given throughout the semester covering two chapters each *(Best top five quiz scores will be included in final grade)*.

**Class Policy**:
(1) All the students are asked to participate in classes. A student will receive a grade of "F" for this class if he/she misses more than 1/3 of the total classes.
(2) Every assignment should be submitted on time. Late submission is acceptable within one week after the deadline but with 80% maximum possible points.
(3) A make-up can be provided for exams and labs *(partial credit for labs)* only for medical (or family) emergency, car accident on road to school, or other special situations. It is the student's responsibility to contact the instructor immediately to schedule a make-up. If a student involves university business on the day of exam or lab, he/she is expected to reschedule the exam or quiz in advance. However, no make-up is available for the final exam.
(4) No cell phone policy. If you must respond consistently to texts, emails, etc. without dismissing yourself from the classroom, you will be marked absent and it will be reflected in your final grade.

**Class Schedule**:

| Date | Content |
|---|---|
| 8/31<br>Week 1 | No Class |
| 9/7<br>Week 2 | Class Orientation; Classification of Motor Skills<br>Measurement of Motor Performance<br>*Reading: Chap 1 & Chap. 2* |
| 9/14<br>Week 3 | Neuromotor Basis for Motor Control<br>*Reading: Chap. 4* |
| 9/21<br>Week 4 | Motor Control Theories<br>*Reading: Chap. 5* |
| 9/28<br>Week 5 | Sensory and Motor Control<br>*Reading: Chap. 6* |
| 10/5<br>Week 6 | Performance and Motor Control Characteristics<br>*Reading: Chap. 7* |
| 10/12<br>Week 7 | Action Preparation<br>*Reading: Chap 8*<br>***In Class Lab*** |

| | |
|---|---|
| 10/19<br>Week 8 | **Midterm** |
| 10/26<br>Week 9 | Attention and Memory<br>*Reading: Chap 9 & 10* |
| 11/2<br>Week 10 | Defining, Assessing and Transfer of Learning<br>*Reading: Chap. 11 & 13* |
| 11/9<br>Week 11 | Instruction and Augmented Feedback<br>*Reading: Chap. 14 & 15* |
| 11/16<br>Week 12 | Practice Condition **(Introduce Research Assignment)**<br>*Reading: Chap 16 & 17* |
| 11/23<br>Week 13 | *No Class*<br>***Thanksgiving*** |
| 11/30<br>Week 14 | Practice Condition<br>*Reading: Chap 18 & 19*<br>**Research Assignment Due** |
| 12/7<br>Week 15 | ***In Class Lab***<br>Discuss Final Exam |
| 12/14 | **Final Exam** |

**Grading System:**
The following will be used to determine grades in this course:

| | |
|---|---|
| Exams (2 x 100) | 200 |
| Quizzes (5 x 10) | 50 |
| Research Assignment | 50 |
| Lab Assignments (2 x 20) | 40 |
| Class Participation | 10 |
| **TOTAL** | **350 points** |

Grades will be determined on a straight scale:

| | |
|---|---|
| A = 93 – 100% (4.00) *325.5+* | A- = 90 – 92.9% (3.67) *315+* |
| B+ = 87 – 89.9% (3.33) *304.5+* | B = 83 – 86.9% (3.00) *290.5+* |
| B- = 80 – 82.9% (2.67) *280+* | C+ = 77 – 79.9% (2.33) *269.5+* |
| C = 73 – 76.9% (2.00) *255.5+* | C- = 70 – 72.9% (1.67) *245+* |
| D+ = 67 – 69.9% (1.33) | D = 63 – 66.9% (1.00) |
| D- = 60 – 62.9% (0.67) | F < 60% (0.00) |

**Enrollment/ Withdrawal Policy:**
Students must add classes no later than the end of the first week of classes. This includes online classes. Students may continue to drop classes (with full tuition cancellation) by Wednesday, September 14, 2016.

Students who withdraw from a course from September, 29, 2016 to November, 13, 2016 will receive a grade of WP, WF, or WN.

- WP will be awarded if the student is passing the course (based on work due to date) at the time the withdrawal is requested
- WF will be awarded if the student is failing the course (based on work due to date) at the time the withdrawal is requested
- WN will be awarded if no materials have been submitted, and so there is no basis for a grade

Students must submit their withdrawal request on-line through Pipeline. The faculty member must approve the withdrawal request before it becomes final, and students should continue to attend class until they receive notification via email that the withdrawal has been approved.

See the university webpage for full details: http://reg.wayne.edu/students/information.php

**Attention Students with Disabilities:**

If you have a documented disability that requires accommodations, you will need to register with Student Disability Services (SDS) for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TDD only). Once you have your accommodations in place, I will be glad to meet with you privately during my office hours to discuss your special needs. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University.

Please be aware that a delay in getting SDS accommodation letters for the current semester may hinder the availability or facilitation of those accommodations in a timely manner. Therefore, it is in your best interest to get your accommodation letters as early in the semester as possible.

**Religious Observance Policy:**

Because of the extraordinary variety of religious affiliations represented in the University student body and staff, the Wayne State University calendar makes no provision for religious holidays. It is University policy, however, to respect the faith and religious obligations of the individual. Students who find that their classes or examinations involve conflicts with their religious observances are expected to notify their instructors well in advance so that alternative arrangements as suitable as possible may be worked out.

**Student Services:**

*The Academic Success Center* (1600 Undergraduate Library) assists students with content in select courses and in strengthening study skills. Visit www.success.wayne.edu for schedules and information on study skills workshops, tutoring and supplemental instruction (primarily in 1000 and 2000 level courses).

The Writing Center is located on the 2nd floor of the Undergraduate Library and provides individual tutoring consultations free of charge. Visit http://clasweb.clas.wayne.edu/writing to obtain information on tutors, appointments, and the type of help they can provide.