

**KINE 4323: Motor Control and Learning**  
Fall 2013

**Instructor:** Dr. Priscila Caçola  
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**Office Hours:** by appointment  
**Class Website:** Blackboard

**Section Information:** KINE 4323-001  
**Time and Place of Class Meetings:** T/R 11:00am – 12:20pm, SH 105

**Description of Course Content:**

This course will expose students to the theoretical perspectives and current principles associated with the control and learning of movement skills. Specifically, the neural and mechanical mechanisms underlying motor behavior and the variables influencing motor learning will be addressed. Throughout the course, application of theoretical concepts to instructional and clinical settings will be emphasized. Prerequisite: KINE 3325 or Instructor's permission.

**Student Learning Outcomes:**

In my view, you will leave this class well prepared to teach and rehabilitate motor skills of any kind. You will also be able to critically reflect on the scientific and applied basis of motor learning and control.

- The student will understand the foundation of Movement Science.
- The student will develop an understanding of the general classification of motor skills.
- The student will realize that performing voluntary coordinated movement requires motor control and attention.
- The student will be more familiar with the theories that attempt to explain how movement skills are controlled and learned.
- The student will understand the various measurement techniques used to examine motor performance and distinguish temporary changes in performance from the relatively permanent changes that accompany learning.
- The student will be able to understand and identify the variables that influence the learning of movement skills.
- The student will become familiar with the techniques and strategies a practitioner and or clinician can employ to enhance learning and subsequent retention of movement skills.

**Required Textbooks and Other Course Materials:**

Required Textbook: Magill, R. A. (2011). *Motor Learning and Control: Concepts and Applications*. McGraw-Hill, 9th edition.

Supplemental Textbook: Schmidt, R. A. & Lee, T. D. (2011). *Motor Control and Learning: A behavioral emphasis*. Human Kinetics, 5<sup>th</sup> edition.

\* Reading of several journal articles will be required throughout the semester (they will be posted on Blackboard)

## Descriptions of major assignments and examinations:

- In-Class Assignments/Quizzes:
  - There will be several in class quizzes throughout the semester with different formats for the quizzes – multiple-choice answers, fill in the blanks, essays, blog posts, etc.
- Tests:
  - There will be 3 tests during the semester. Format and content will be discussed in class.
- Final Exam:
  - The final exam will be a compilation of ALL class content.
- Participation (Class & Discussion Board):
  - Class: Include but are not limited to answer questions, contribute to discussions, pose questions, etc.
  - Blackboard: For each forum/topic opened by the instructor you are expected to participate by giving a relevant contribution to the discussion. The student participation will be graded for each relevant contribution in the forum (relevant = adding information that enhances everyone's knowledge about a specific/proposed topic). Otherwise (if the information was not considered relevant (adding knowledge to the discussion), a student will be graded with a zero. Proportional grade will be calculated.

**Attendance policy:** Do not plan on missing any classes. We will cover new material every day. It is important that you attend class. **Excused absences include university approved absences or those that I receive prior notification of (i.e. illness, doctor appointments, etc.) AND approve as an excused absence (in other words, it does not mean that because you notified me, that the absence will be excused).** Each student is expected to prepare for class by reading the material prior to class. If you miss a class, you are responsible for obtaining all information presented, this means talk to your classmates about getting notes PRIOR to asking me questions about the class you missed. No late work of will be accepted! No excuses.

**Grading:** Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.

### Grade breakdown:

- Participation (Class & Discussion Board) – 10 pts
- Quizzes – 10 pts (total)
- Tests – 60 pts (total)
- Final Exam – 20 pts

Scale: 90 – 100 pts = A, 80 – 89.99 = B, 70 – 79.99 = C, 60 – 69.99 = D, <60 = F

**Note that grades are earned not given. NO GRADES will be bumped or curved at the end of the semester!**

**Expectations for In-Class Time:** You are expected to attend this class ACTIVELY. I fully expect you come to class prepared (meaning you read what you were supposed to read, wrote what you were supposed to write, and so on). Your participation is of fundamental importance for this class (and grade). It is strongly recommended that you take notes. Examples of improper participation include, but are not limited to leaving class early before the instructor dismisses class, sleeping, reading the paper, working on other assignments, surfing the internet (if it's not class related), or any other inattentive activity. PLEASE TURN OFF AND PUT AWAY YOUR PHONE. NO TEXT MESSAGING WILL BE ALLOWED. NO HEADPHONES, VIDEO, OR AUDIO RECORDING WILL BE ALLOWED.

**Expectations for Out-of-Class Study:** Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 10 hours per week (minimum) of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

**Make-up Exams:** There will be no make-ups for missed in class work, except for **university excused absences** that must be turned in one week prior to the exam. However, in cases of extreme emergencies contact the instructor **before** the time and your situation will be **considered** for approval or denial. Please remember that only because your situation will be considered it does not mean that it will be approved.

**Grade Grievances:** Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate / graduate catalog. [Some instructors opt to cut and paste the relevant policy here. For undergraduate courses, see [http://www.uta.edu/catalog/content/general/academic\\_regulations.aspx#10](http://www.uta.edu/catalog/content/general/academic_regulations.aspx#10); for graduate courses, see <http://www.uta.edu/gradcatalog/2012/general/regulations/#grades>.]

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering.

**Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/ses/fao>).

**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:** All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*"I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code."*

**Student Support Services:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located **[insert a description of the nearest exit/emergency exit]**. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**FALL 2013 – KINE 4323  
TENTATIVE CLASS SCHEDULE**

<b>Week</b>	<b>Date</b>		<b>Topic</b>
1	8/22		Syllabus/ Introduction
2	8/26	<b>UNIT 1: Introduction to motor skills and abilities</b>	Chapter 1 – The classification of motor skills
2	8/28		Chapter 2 – The measurement of motor performance
3	9/03		Chapter 3 – Motor abilities
3	9/05		Review & Labs
4	9/10	<b>UNIT 2: Introduction to motor control</b>	Chapter 4 – Neuromotor basis for motor control
4	9/12		Chapter 5 – Motor control theories
5	9/17		Chapter 6 – Sensory components of motor control
5	9/19		Chapter 7 – Performance and motor control characteristics of functional skills
6	9/24		Chapter 8 – Action preparation
6	9/26		Review & Labs
<b>7</b>	<b>10/01</b>		<b>Test 1</b>
7	10/03	<b>UNIT 3: Attention and memory</b>	Chapter 9 – Attention as a limited capacity resource
8	10/08		Chapter 10 – Memory components, forgetting, and strategies
8	10/10	<b>UNIT 4: Introduction to motor skill learning</b>	Chapter 11 – Defining and assessing learning
9	10/15		Chapter 12 – The stages of learning
9	10/17		Chapter 13 – Transfer of learning
10	10/22		Review & Labs
<b>10</b>	<b>10/24</b>		<b>Test 2</b>
11	10/29	<b>UNIT 5: Instruction and augmented feedback</b>	Chapter 14 – Demonstration and verbal instructions
11	10/31		Chapter 15 – Augmented feedback
12	11/05		Review & Labs
12	11/07	<b>UNIT 6: Practice conditions</b>	Chapter 16 – Practice variability and specificity
13	11/12		Chapter 17 – The amount and distribution of practice
13	11/14		Chapter 18 – Whole and part practice
14	11/19		Chapter 19 – Mental practice
14	11/21		Review & Labs
<b>15</b>	<b>11/26</b>		<b>Test 3</b>
15	11/28		Thanksgiving holiday
16	12/03		Final review & Labs
	<b>12/10</b>		<b>FINAL EXAM – 11:00am – 1:30pm</b>

Instructions & reminders:

- I expect you read the assigned chapter prior to the class.
- Homework, quizzes, group work, labs, will happen occasionally and I will always announce it in class and send an email about anything that comes up. Keep up with your email, blackboard, but most importantly, class attendance.
- The schedule can change to accommodate the needs of the class – see the “pretty” note below.

***“As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course”. – Priscila M. Caçola, Ph.D.***