

Advanced Topics in Cognitive Science
“Cognitive Neuroscience Perspective”
FALL 2015

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Section Information: Psyc 4431-001
Course Website: <http://www.uta.edu/blackboard/>
Time and Place of Class Meetings: T/TH 12:30-1:50; SH129
(Lab- F 2-3:50; ELAB 256)

Email: Please email the instructor **ONLY** via the course **BLACKBOARD** site. It will make a more direct and efficient method of communication between the instructor and the students enrolled in this course, in that such email shows the course title as the subject. **The instructor will only reply to emails that originate from Blackboard.** Once logged into this course, click on “UTA Email” from the left menu, then choose (a) “all Instructor Users” (which will send email to both Instructor and TA) or (b) “Single/Select Users” (then find me in the list of users).

Course Description: This course will focus upon core topics in neuroimaging and behavioral studies on cognition. This course will be a combination of lecture and presentation/discussion format. The instructor will provide an overview of a topic and students will present assigned articles. All readings will be provided through Blackboard. Students who are not presenting will be required to submit two substantial questions or relevant discussion items via Blackboard by a day prior to the presentation to promote discussion.

Student Learning Outcomes: The course aims to study the current neuroimaging/behavioral studies from cognitive neuroscientific perspective. The goal is to provide a broad introduction of cognitive studies including fMRI, EEG, and tDCS studies that will serve as a steppingstone for further understanding of specific topics in cognitive neuroscience in depth.

Textbook & Course Materials: There is no textbook for this class. All course readings will be provided through Blackboard.

Major Assignments & Examinations: Students are required to present two-three class presentations (based on assigned readings), to actively participate in class discussion, and to submit one research project proposal and one research project paper. In addition, students will be asked to present their own research proposal and the completed research during class. Students are expected to attend class, to complete the weekly readings before class (summary for article) and to prepare questions for discussion of relevant topics during class.

Attendance: Your participation for each class will be counted although attendance is not counted to the grade. Your participation for the class is vital for your progress in this course. Therefore, attendance is expected.

Course Assessments:

There is no mid-term or final exam.

1. Research Article Presentation (30%): Research articles will be assigned for each topic and the presentation of individually assigned articles will be evaluated. Each presentation should cover different topics. Should you want to present material other than the articles on class reading list, you may do so with the instructor's permission.

Each student in the class will give at least 2 slide presentations for the target articles and related research. The presentation should last 25-30 minutes. A presenter should be prepared to spend approximately 20 minutes giving the presentation and 10 minutes answering questions regarding the presentation. A grading rubric is available on blackboard. The specific presentation dates will be posted on the tentative schedule of presentations. This assignment will be worth 100 points for each presentation.

2. Discussion/Participation (15%): Students are expected to participate in class actively. Class participation will be assessed in 2 ways. These assignments will be used to foster discussion and class participation on various topics covered in the course.

(1) For each article discussed in class, students except the presenter of the target article should prepare 2 discussion questions. The questions/discussion points will be submitted via Blackboard and due by midnight CST the evening prior to the discussion of the article in class. For example, if the article is to be discussed during class on Tuesday September 1, you should upload discussion questions by the evening of Monday August 31 at midnight CST. The tentative schedule and templates are available and should be used for preparation of the class.

(2) Active participation in discussion will also be assessed through your active questioning and the involvement in discussion.

3. Oral Presentations of Research Project (30%): Each student will be presenting the progress of the research proposal and the completed research in the class.

(1) The first presentation will be a formal **proposal** of the research to be conducted. It should include relevant background information as well as the study design, methods, as well as hypotheses. (10%)

(2) The second presentation will be a formal presentation of the **completed research**. It should include background information, methods, results, and a discussion. (20%)

4. Research proposal and Research manuscript (15%): Each student will write a proposal for the study he/she will be running (5%) and a manuscript describing the study that he/she conducted during the course of this class (10%). Both proposal and manuscript will conform to APA style and will present a study conducted on a topic in Memory and Cognition. A grading rubric is available on Blackboard.

5. Lab activities (10%): refer lab syllabus for details

Grading Policy: Grades are based on a percentage score and not a curve. If you are taking the course Pass/Fail, you must have at least 70% to Pass. All coursework must be completed by the last day of class for credit.

Percentage Score required to obtain each letter grade

100%-90% A

89%-80% B

79%-70% C

69%-60% D

59%-less F

Missed work including presentations or discussion will be accorded a grade of zero unless the student submits a valid written excuse recognized by the university's rules. The final grade will be calculated based on the sum scores of presentation, discussion, class participation, and lab activities.

Make-up Exam Policy: This course does not have any written examinations. All written assignments are to be submitted via blackboard by the dates indicated on the tentative calendar. All oral presentations are to be given in class or lab at the designated time. A grade of 0 will be given to any assignment or presentations not completed by the designated completion date.

Course Business Communication: All course-related announcements and updates of schedule will be communicated via Blackboard.

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://wweb.uta.edu/aao/fao/>).

Disability Accommodations: UT 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)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. 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 disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD)**. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or 817-272-3364(T).
Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or 817-272-3671(T).

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 or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.*

Academic Integrity: Students enrolled all UT Arlington courses 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.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. **Any violations to the academic integrity policy will be result in the course grade of 'F'.**

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 an online 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. 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 individuals with disabilities.

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, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>

The English Writing Center (411LIBR): Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In **Quick Hits** sessions during all open hours Mon-Thurs. Register and make appointments online at <http://uta.mywconline.com>. Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see www.uta.edu/owl for detailed information.

<p>Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381</p>

Course Schedule*

Week	Topic	
8/27	Introduction	
9/01	Overview of Behavioral study Overview of Neuroimaging study	
9/08	Subsequent memory effects	Article Presentation
9/15	Item Memory	Article Presentation
9/22	Associative Memory/ Source memory	Article Presentation
9/29	Working Memory	Article Presentation
10/06	Cognitive Control & Memory	Article Presentation
10/13	Memory Disorders	Article Presentation
10/20	Research Proposal Presentations	
10/27	Research Proposal Presentations	
11/03	Memory Errors	Article Presentation
11/10	Emotion & Memory	Article Presentation
11/17	Memory Development, Aging, Sleep, & Reward Psychonomics meeting (11/19)	Article Presentation
11/24	Research Project Presentations Thanksgiving Holiday (11/26)	
12/01	Research Project Presentations	
12/08	Research Project Presentations	

*Lecture content/Presentation dates are tentative and subject to shift according to the needs of an individual class. 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.