Cognitive Neuroscience

Psych 160A

Instructor:

Course Reader:

TBD

Prof. Emily Grossman Email: grossman@uci.edu

Office: SBSG 2558 Office Hours: TBD

Course Overview:

In this course we will discuss the relationship between brain and cognition, which includes sensory perception, attention, language, memory and higher cognitive and emotional functions. This class will discuss the organization and function of brain systems that support these cognitive abilities, and how experience is altered when selected aspects of cognition fail (e.g. aphasia, neglect). Evidence will be provided from a range of systems- and behavioral-level experimental techniques, including fMRI, single-unit physiology and case studies of patient populations.

Course Structure:

Lectures. Lectures are intended to complement the text readings, not repeat them, although critical concepts can be found in both. Slides from each lecture will be available for download on the course website following class. Slides are designed to be a study aid, not a replacement for attending the lectures.

Attendance at course lectures is strongly recommended and will contribute to your final course grade. Attendance will be evaluated through in-class question & answers using the iClicker. Clickers can be purchased in the bookstore, on Amazon (any model from iClicker brand will work) or operated through your smart phone. Your clicker <u>must</u> be registered online to your name and UCl student ID (http://iclicker.com). You will obtain credit for attending class when you respond to 75% or more of the questions that day (correct and incorrect responses will all count equally). There are <u>no</u> exceptions for missed questions due to arriving late, missed classes, illness, lost or broken clickers. Class questions written on paper will not be accepted. Your lowest clicker score will be dropped from your final course grade (**one** score dropped).

Readings. Class lectures will be supplemented with readings from the course text ("Principles of Cognitive Neuroscience", by Purves et al., 2nd Edition). Content in the reading is <u>not</u> identical to the lectures, although I will spend extra time on difficult concepts. Good performance on the exams will require both class attendance and keeping up with the readings.

Quizzes & Final. There will be 4 quizzes, the lowest score of which will be dropped (i.e. only three will count towards your final grade). Each quiz will cover course material presented in the lectures and assigned readings prior to the test. Material tends to build as the course moves along, so although the quizzes are not designed to be cumulative, all content is fair game.

Quizzes will take place in the second hour of classes on dates TBD.

The quiz key (correct answers) will be posted on the course website immediately following the quiz. For this reason there are <u>no</u> makeup quizzes, regardless of the reason for missing the quiz. A missed quiz will count as your dropped score.

The final examination will be cumulative and is <u>mandatory</u> (i.e. the grade cannot be dropped). The University has scheduled our final exam for Wednesday Sept 12th, 9:00am – 10:50am.

Extra Credit. You can earn up to three additional percentage points of your final grade in extra credit, either by participating in experiments through the School of Social Sciences or by writing a short paper. Each hour of experiment participation counts for one percentage point of extra credit, for a total possible increase in 3% of your final course grade. Sign up on Sona Systems at http://uci.sona-systems.com.

Alternatively, a well-focused paper (three pages, double-spaced) on a topic <u>directly</u> related to this course will earn up to three percentage points of your final grade in extra-credit. The paper may be a review of recent research, a proposal for a research project or a new theoretical proposal. The paper should cover a topic discussed in this class and must reference at least three unique sources, with at least two of those sources from a peer-reviewed scientific journal. I strongly recommend submitting your paper topic to me prior to writing the paper if there is any doubt as to whether the topic would be acceptable. Papers are accepted at any time in the quarter, up to and including the final exam. Late papers will not be accepted.

Grading. Your final grade will be calculated as the weighted average of your quiz scores, final exam score and attendance, as follows:

20% Highest quiz score

20% Second highest quiz score

20% Third highest quiz score

30% Mandatory, cumulative final exam

10% Clicker attendance

This letter grade scheme will be applied to all quizzes, the final exam and your final grade:

A+ ≥95 %	B+ ≥ 75 %	C+ ≥ 60 %	D+ ≥ 45 %
A ≥ 85 %	B ≥ 70 %	C ≥ 55 %	D ≥ 40 %
A- ≥ 80 %	B- ≥ 65 %	C- ≥ 50 %	D- ≥35 %

Office Hours. Both the course reader and I are available in office hours throughout the quarter to answer questions related to course material. I encourage you to attend, armed with questions. I also encourage you to use the Canvas Discussions to post questions on class materials and readings. I will respond to those comments as quickly as possible. In the days before midterms and the final, we will respond to all questions posted up until 5pm on the evening prior to class.