Neuroscientific Approaches to Social Behavior  
NEURO/PSY 281: Syllabus

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Office Hours: LSRC B248 / SOC-PSY 309 by appointment only

Course Description: Social neuroscience results from the interaction of social psychological questions and cognitive neuroscience methodologies. However, the study of social neuroscience incorporates a number of disciplines beyond these two fields to answer questions related to social behavior and neural function. As a result, researchers in the field employ a variety of scientific methods commonly used in social psychology, cognitive neuroscience, cognitive psychology, philosophy, computer science, developmental psychology, evolutionary anthropology, behavioral economics, and behavioral neuroscience, among others. This course provides a survey of the more common of these methodologies, and focuses on fundamental questions in the field first addressed in the social psychological literature. As a result, successful completion of the course prepares the student for research that address social questions relative to the brain and neuroscience questions influenced by social behavior.

The course covers thirteen (13) modules. Each module addresses questions related to the many disciplines employed to answer social behavior questions, and discusses the relevant methodologies (in italics).

Evaluation: Students will be evaluated with two take home assignments, one term paper, and two exams (midterm & final).

The first exam (midterm) will cover reading material and lectures up until that point of the semester, while the final will cover all modules.

The grading scheme for the class is below.
Exam (Midterm) = 10%
Exam (Final) = 30%
Take Home Assignment #1 = 15%
Take Home Assignment #2 = 15%
Paper = 30%
Modules & Class Schedule

1. Introduction to Social Neuroscience and Overview of Topics & Methodologies:
   - **08/28/12**
     - Introductions
   - **08/30/12**

2. Statistical Analyses and Experimental Methodology
   - **09/04/12**
   - **09/06/12**

3. The Social Brain: *Brain Lesions and TMS*
   - **09/11/12**


- **09/13/12**

4. Cognitive Neuroscience I: EEG

- **09/18/12**

- **09/20/12**

5. Cognitive Neuroscience II: fMRI

- **09/25/11**

- **09/27/11**

6. Affective Neuroscience: *Facial EMG, GSR, Heart-Rate, and Eye-Blink*

- **10/02/12**


7. Social Hormones: Saliva Assays


8. Genetics and Social Behavior: DNA Sequencing


amygdala activation and personality traits in healthy humans. 
*Molecular Psychiatry, 14,* 968-975.

   • 10/23/12
   • 10/25/12

10. Social Neuroeconomics: Economic Games
   • 10/30/12
   • 11/01/12

11. Philosophy of Mind and Science: Thought Experiments
   • 11/06/12
11/08/12

12. Evolutionary Anthropology: Primate (and Other) Models
- 11/13/12

- 11/15/12

13. Machine Learning and Artificial Social Intelligence: Computer Modeling
- 11/27/12

14. Class Presentations
   - 11/29/12
     - Class Presentations #1
   - 12/04/12
     - Class Presentations #2
   - 12/06/12
     - Class Presentations #3
   - Final TBA; Modules 1-14