

**Course Objectives:**

This course will provide an overview of past and current theories of emotion and the neurobiological systems that underpin them. Topics will include how we perceive, express, and experience emotions and the role of emotion in motivated thoughts, actions, and experiences. Special attention will be paid to social aspects of emotion. The course will highlight the role that evolution, neurodevelopment, and clinical observation play in our understanding of emotional processes.

**Instructor:**

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**Office hours:** Meetings with students will be **by appointment only**. I encourage students to schedule such appointments with me either after class or via email.

**Required Reading:**

**Primary Text (required):** Ward, J. The Students Guide to Social Neuroscience, first edition  
Psychology Press 2012

**Supplementary Material:** During the course period, various research articles/chapters will be assigned. I will send these articles to you in pdf form or I will ask you to get them from the library or online using *pubmed*.

**Grading Policy:**

**Exams:** There will be two midterm exams and one non-cumulative final exam. Students will have the option of dropping your lowest score. **Exams will not be rescheduled** unless due to an authorized absence, such as a religious holiday or a conflicting school sponsored activities (e.g. varsity sports teams, etc.). In such a case, you must notify me via email as early as possible and at least 72 hours prior to the exam. Exams will consist of multiple choice, short answer and short essay questions.

**Final Grade:** Your grade will be based on your (3) exams (80%) and class participation (20%).

**Extra Credit:** Extra credit will be given towards students who participated in research experiments, the details of which will be discussed in class.

**Cheating/Plagiarism:** See University's guidelines on Academic Integrity on these issues (<http://www.upenn.edu/osc>)

**Attendance:** Role call will be taken at the beginning of each class. Obviously, attendance directly bears on class participation - an ingredient in your final grade.

**Schedule At a Glance:**

Week	Topic	Exams
1	Course Introduction	
2	Affect and Emotion: Theories and Models	

3	The Brain, Affective Systems, and How We Measure Them	
4	Emotion and Motivation I: Neurobiology of Fear and Approach/Avoidance Behavior	
5	Emotion and Motivation II: Neurobiology of Rewards and Punishments	Exam #1
6	Affective Appraisal I — Neural Mechanisms of Facial Affect Perception	
7	Affective Appraisal II — Neural Mechanisms of Voice and Body Perception	
8	Affective Experience: How Do We Experience Emotion?	
9	***** <i>SPRING BREAK</i> *****	
10	Affective Actions: How Does Emotion Shape Our Thoughts and Actions?	
11	Neural Underpinnings of Social Communication and Collaboration	Exam #2
12	Neurobiology of Emotional and Social Development	
13	Pathophysiology of Emotion Processing	
14		Final Exam

*\*add deadline: February 1<sup>th</sup>. \*\*drop deadline: February 19<sup>th</sup>*