Instructor: Nancy S. Koven, Ph.D.
Email: nkoven@bates.edu
Office: 365 Pettengill Hall
Office Hours: as needed, by appointment

Required Text


The above text is required for this course and is available at the campus bookstore or through online book vendors.

Suggested Text


The above text is recommended but not required. Several chapters from this text are assigned. The chapters will be available on our WebCT course page.

Texts on Reserve


The above texts are on reserve for you to consult in Ladd Library. Several chapters in the Davidson et al. (2003) are on our reading list for the course.

Course Description

A seminar that examines advances in the emerging interdisciplinary field of affective neuroscience. Topics include autonomic psychophysiology, genetics of emotional development, expression of emotion, cognitive components of emotion, emotion in personality and temperament, emotion and social processes, evolutionary perspectives of affect, emotion dysregulation and psychopathology, and emotion and health. A wide range of research techniques are introduced, including positron emission topography, functional magnetic resonance imaging, neuropsychological assessment, genetic assay, startle blink response, event-related potentials, skin conductance, facial reactivity,
transcranial magnetic stimulation, and neuropharmacology. Prerequisite(s): Neuroscience/Psychology 200 and Psychology 261.

Special Considerations: Students with Disabilities and Learning Differences

If you have a condition or disability that causes difficulty with learning in the classroom or completing assignments as described, please see me as soon as possible. Documentation from the Office of the Dean of Students is needed before accommodations can be made.

Classroom Environment

It is essential that our classroom be a place in which people feel comfortable expressing their thoughts, feelings, and opinions without fear of unduly critical or judgmental responses, especially during discussions. I expect all students to be respectful of the widely varied experiences and backgrounds represented by the classroom members as a group. Disrespect or discrimination on any basis will not be tolerated.

Academic Honesty

Cheating includes plagiarism, which is the representation of someone else’s work as your own. Please familiarize yourself with the College’s policy on academic dishonesty at: http://abacus.bates.edu/pubs/Plagiarism/plagiarism.html#0.

Grading Elements

This course will follow a seminar format, with primary foci on reading, class participation, and writing. There are no exams or quizzes in this course. It is imperative that you complete all assigned readings prior to the class period for which it is assigned. The reading load is such that you may wish to spread out the readings across the week so that you are not trying to process volumes of information in a single afternoon or evening. Topics for each week are outlined in the course calendar. For each weekly topic, half of the students are assigned to be discussion leaders and the other half of the students are assigned to write thought papers. These responsibilities will be rotated so that each student will serve as a discussion leader six times and will write thought papers six times throughout the semester.

Thought Papers

Thought papers are brief, reactionary papers (1.5 – 2.0 pages single spaced) that summarize your responses to the assigned readings. Though written in the first person and from the perspective that the audience is familiar with you, these thought papers should nonetheless be formal in that you should adhere to the mechanics of good writing. The purpose of the thought paper is (1) to stimulate analytic thinking prior to class discussion for the writer and (2) provide fodder for the students assigned as discussion leaders to draw upon during class discussion. Thought papers are due no later than 2:00 pm on the Monday preceding the Wednesday meeting. It is each writer’s responsibility to email me his/her thought paper by this deadline so that I can post the papers on our WebCT course page. Points will be deducted for lateness. Thought papers will be accessible by other members of the class; in fact, it is expected that the discussion leaders will access and read each thought paper prior to the class meeting. Altogether, each student will write 5 thought papers over the course of the semester.
Class Participation

Class participation is crucial for success of this class and success in this class. Class participation for this course is two-part: (1) ability to stimulate and lead class discussion for the weeks in which you are assigned as a discussion leader and (2) actively contribute to class discussion during the weeks that you have been assigned to write a thought paper.

Term Paper

There is one term paper for this course, which is due no later than the time assigned by the Registrar as what would normally be our final exam time: Thursday, April 12th at 10:30 am. The paper is due in hard copy form, to be turned in to the box outside my office door. You are welcome to finish and turn in your paper anytime sooner than April 12th. Points will be deducted for each 24 hour period in which the paper is late. Papers are expected to be in 15 pages (excluding references) and written in APA format, with no fewer than 10 independent references.

The paper can be on any topic within the broad scope of affective neuroscience. It can be related to one of the topics covered in class or to any number of topics that we will not have time to cover in class. Keeping in mind that neuroscience is inherently interdisciplinary, you are encouraged to think creatively and to weave in material from other disciplines such as computer science, social psychology, philosophy, linguistics, biology, law and politics, women and gender studies, religion, anthropology, or ethnic and race studies, as appropriate. Topics must be approved by me in advance. It is not acceptable to recycle a paper you have written for another course. Email me your topic of interest no later than Sunday afternoon of February 11th.

Grading

There are 9 grading elements for this course:

Class-Based Writing

- Thought Paper 1  7% of total grade
- Thought Paper 2  7% of total grade
- Thought Paper 3  7% of total grade
- Thought Paper 4  7% of total grade
- Thought Paper 5  7% of total grade

Discussion Participation

- Discussion Facilitation Skills  20% of total grade
- Contribution to Discussion  20% of total grade

Term Paper  25% of total grade

Course Calendar

Reading the assigned material before the day on which it is listed is critical for success in this course. If not found in our course text, most assigned readings for the discussion sections will posted on our WebCT page. Readings not available on WebCT will be put on reserve in Ladd Library.
1/10/07  Week 1: Overview of affective neuroscience

- Textbook chapter 1: The study of emotion from the perspective of cognitive neuroscience (pgs. 3-8)
- Textbook chapter 2: A second chance for emotion (pgs. 12-23)
- Kalat & Shiota chapter 1: The nature of emotions (pgs. 2-28)

Discussion Leader: Prof Koven  
Thought Paper Writers: no one

1/17/07  Week 2: Background reading on emotions

- Textbook chapter 3: Cognition and emotion: Always, sometimes, or never? (pgs. 24-61)
- Kalat & Shiota chapter 2: Classification of emotions (pgs. 29-48)
- Kalat & Shiota chapter 3: Culture and emotion (pgs. 49-74)

Discussion Leaders: Ryan, Elizabeth, Alli, Chris  
Thought Paper Writers: Cary, Mimi, Jon

1/24/07  Week 3: Methods of affective neuroscience

- Textbook chapter 11: Measuring emotion: Behavior, feeling, and physiology (pgs. 242-276)

Discussion Leaders: Cary, Mimi, Jon 
Thought Paper Writers: Ryan, Elizabeth, Alli, Chris

1/31/07  Week 4: Neuroethics: Implications of and for affective neuroscience


Discussion Leaders: Alli, Chris, Cary  
Thought Paper Writers: Elizabeth, Ryan, Mimi, Jon
2/7/07  Week 5: Neuroscience of psychopathy: My brain made me do it!


Discussion Leaders: everyone
Thought Paper Writers: no one

2/14/07  Week 6: Neuroscience of fear and anxiety

- Textbook chapter 7: Cognitive-emotional interactions: Listen to the brain (pgs. 129-155)
- Textbook chapter 17: Positron emission tomography in the study of emotion, anxiety, and anxiety disorders (pgs. 389-406)
- Kalat & Shiota chapter 5: Fear and anxiety (pgs. 100-123)

Discussion Leaders: Elizabeth, Chris, Ryan
Thought Paper Writers: Alli, Cary, Mimi, Jon

NO CLASS ON 2/21/07: WINTER VACATION

2/28/07  Week 8: Neuroscience of other negative emotions

- Kalat & Shiota chapter 6: Anger (pgs. 124-147)
- Kalat & Shiota chapter 10: Disgust and contempt (pgs. 212-225)

Discussion Leaders: Alli, Cary, Mimi, Jon
Thought Paper Writers: Elizabeth, Chris, Ryan

3/7/07  Week 9: Neuroscience of moral emotions

- complete Moral Sense Test online: [http://moral.wjh.harvard.edu/index2.html](http://moral.wjh.harvard.edu/index2.html)

Discussion Leaders: Elizabeth, Alli, Chris, Jon  
Thought Paper Writers: Ryan, Cary, Mimi

### 3/14/07  Week 10: Neuroscience of love and positive emotion

- Kalat & Shiota chapter 9: Love (pgs. 187-211)  

Discussion Leaders: Ryan, Cary, Mimi  
Thought Paper Writers: Jon, Elizabeth, Alli, Chris

### 3/21/07  Week 11: Neuroscience of alexithymia, emotional intelligence, and emotion regulation

- Kalat & Shiota chapter 13: Emotional decisions and emotional intelligence (pgs. 260-280)  

Discussion Leaders: Elizabeth, Ryan, Mimi, Jon  
Thought Paper Writers: Alli, Chris, Cary

### 3/28/07  Week 12: Neuroscience of religious experience, art appreciation, and other fervor

- New York Times article about Dali Lama and neuroscience of meditation

Discussion Leaders: Elizabeth, Chris, Ryan  
Thought Paper Writers: Alli, Cary, Mimi, Jon
4/4/07  Week 13: Neuroscience of unconscious emotions

- Textbook chapter 12: Blindsight: Implications for the conscious experience of emotion (pgs. 277-295)
- Textbook chapter 13: Unconscious emotion: Evolutionary perspectives, psychophysiological data, and neuropsychological mechanisms (pgs. 296-327)

Discussion Leaders: Alli, Cary, Mimi, Jon
Thought Paper Writers: Elizabeth, Chris, Ryan