PSYCH 53: SOCIAL NEUROSCIENCE

Fall 2013 Tue/Thu 4:00 – 5:50 (X-HOUR: M 5:00 – 5:50) Moore XXX

Instructor: Professor Jon Freeman TA: Beau Sievers
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Office Hours: Thursday 3 – 4 pm or by appt. Office Hours:

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COURSE DESCRIPTION

This course will provide an overview of the rapidly growing field of social neuroscience. We will consider primarily how social processes are implemented at the neural level, but also how neural mechanisms help give rise to social phenomena and constrain culture. Many believe that the large expansion of the human brain evolved due to the complex demands of dealing with social others—competing or cooperating with them, deceiving or empathizing with them, understanding or misjudging them. What kind of "social brain" has this evolutionary past left us with? In this course, we will review current theories and methods guiding social neuroscience and recent research examining the brain basis of social processes, including theory of mind; empathy; emotion; reading faces, bodies, and voices; morality; among others. Overall, this course will introduce students to the emerging field of social neuroscience and its multi-level approach to understanding the brain in its social context.

TEXTBOOK

Ward, D. The Student's Guide to Social Neuroscience. New York: Psychology Press.

ASSIGNMENTS

Research Thought Papers

2 pages, 1" margins, double-spaced, 11 or 12 pt. font.

Two research thought papers will be due this term. In each, you will select an original research article of your choice. These will involve you expanding on a topic you found particularly interesting from the course material. These will be evaluated on how well they connect the article to ideas from class in a novel, interesting, and meaningful way. This, of course, will be influenced by clarity and concision in writing as well.

Discussion Teams

The class will be divided into a number of discussion teams. Each team will lead an hour discussion on the assigned readings. These discussions should unpack the assigned readings and relate them to relevant material from the class (previous readings, textbook chapters, class discussion and material I've presented) in a novel, interesting, and meaningful fashion. Discussion teams have a great deal of latitude

in form of presentation (e.g., standard PowerPoint presentations, breaking into small groups, debate, inclass experiment)—whatever the team feels would best convey the critical ideas most effectively and interestingly. Discussions will be evaluated on content, effectiveness, and clarity. Creative tactics to discussion are not required but they could certainly help by increasing effectiveness and clarity. Each team should schedule a meeting with me in advance to go over the discussion plan. Each student should plan on having a relatively equal role in the discussion. Students will be evaluated separately; that said, if the team is dysfunctional then everyone's discussion leading will likely suffer.

Exams

There will be a midterm and a final, which will include multiple choice and short answer/essay questions.

GRADING

Research Thought Paper 1	15%	Fri, Oct 4 @ 5pm
Midterm Exam	25%	Tue, Oct 15
Research Thought Paper 2	15%	Fri, Nov 1 @ 5pm
Final Exam	25%	Tue, Nov 26 @ 3pm
Discussion Team Presentation	15%	_
General Class Participation	5%	

POLICIES

Attendance

You should plan on attending all class sessions. Please let me know in advance if you will be missing a class. I will often be discussing material not covered in the textbook or assigned readings, and so you would be missing this material (which could be covered on the exams). Of course, I hope you will be interested to come to class for the sheer excitement of it all (!), regardless of practical exam concerns.

Disabilities

Those with disabilities who may need accommodations should make an appointment with me early in the term. Once SAS has authorized accommodations, the College expects students to show the originally signed SAS Accommodations/Consent Form and/or a letter on SAS letterhead to their professor. As a first step, if you have questions about whether you qualify to receive accommodations, you should contact the SAS office.

Late Work

Without an official documented College excuse (health or family emergency), assignments may be accepted after their deadline, but they will be penalized one letter grade per day late.

Academic Dishonesty

The College has specific guidelines regarding cheating, plagiarism, and academic dishonesty. If caught, students will fail the course, will be reported to the College, and the College will impose a set of penalties. This course adheres to the guidelines of Academic Honor published in the Dartmouth College Bulletin: Organization, Regulations and Courses, 2011-2012. Also see: http://www.dartmouth.edu/~deancoll.

COURSE SCHEDULE

Readings may change to adapt to the progression of the class. Non-textbook readings will be posted on Blackboard.

Introduction to Social Neuroscience

Tue, Sept 17 Overview

Thu, Sept 19 Ward, Chapter 1

Cacioppo, J., T., Berntson, G. G., Lorig, T. S., Norris, C. J., Rickett, E., & Nusbaum, H. (2003). Just because you're imaging the brain doesn't mean you can stop using your head: A primer and set of first principles. *JPSP*, 85, 650-661.

Mitchell, J. P. (2008). Contributions of functional neuroimaging to the study of social cognition. *Current Directions in Psychological Science*, 17(2), 142-146.

Methods of Social Neuroscience

Mon, Sept 23 (X-HOUR)

Ward, Chapter 2

Tue, Sept 24

Ward, Chapter 2 (continued)

Discussion Team #1

Dovidio, J. F., Kawakami, K., Johnson, C., Johnson, B., & Howard, A. (1997). On the nature of prejudice: Automatic and controlled processes. *JESP*, 33, 510-540.

Cunningham, Johnson, Raye, Gatenby, Gore, & Banaji (2004). Separate neural components in the processing of Black and White faces. *Psychological Science*, *15*, 806-813

Emotion and Motivation

Tue, Oct 1

Ward, Chapter 4

Thu, Oct 3

Ward, Chapter 4 (continued)

Discussion Team #2

Jack, R. E., Garrod, O. G., Yu, H., Caldara, R., & Schyns, P. G. (2012). Facial expressions of emotion are not culturally universal. *PNAS*, 109(19), 7241-7244.

Ochsner, K. N., Feldman Barrett, L. (2001). A multiprocess perspective on the neuroscience of emotion. In T. J. Mayne & G. A. Bonanno (Eds.), *Emotions: Current issues and future directions* (pp. 38-81). New York, NY: The Guilford Press.

Fri, Oct 4

Research Thought Paper Due by 5pm

Understanding Others

Tue, Oct 8

Ward, Chapter 6

Thu, Oct 10

Ward, Chapter 6 (continued)

Discussion Team #3

Freeman, J.B., Schiller, D., Rule, N.O., & Ambady, N. (2010). The neural origins of superficial and individuated judgments about ingroup and outgroup members. *Human Brain Mapping*, 31, 150-159.

Mitchell, J. P., Macrae, C. N., & Banaji, M. R. (2006). Dissociable medial prefrontal contributions to judgments of similar and dissimilar others. *Neuron*, 50(4), 655-663.

Tue, Oct 15

MIDTERM

Reading Faces, Bodies, and Voices

Thu, Oct 17

Ward, Chapter 5

Tue, Oct 22

Ward, Chapter 5 (continued)

Freeman, J.B., Johnson, K.L., Adams, R.B., & Ambady, N. (2012). The social—sensory interface: Category interactions in person perception. *Frontiers in Integrative Neuroscience*, 6, e81, 1-13.

Thu, Oct 24

Discussion Team #4

Atkinson, A., Heberlein, A., & Adolphs, R. (2010). Are people special? A brain's eye view. In R. B. Adams, N. Ambady, K. Nakayama, & S. Shimojo (Eds.) *The Science of Social Vision*. New York: Oxford University Press.

Oosterhof, N. N., & Todorov, A. (2008). The functional basis of face evaluation. *Proceedings of the National Academy of Sciences*, 105(32), 11087-11092.

Interacting with Others

Tue, Oct 29

Chapter 7

Thu, Oct 31

Chapter 7 (continued)

Discussion Team #5

Zaki, J., & Ochsner, K. (2012). The neuroscience of empathy: progress, pitfalls and promise. *Nature Neuroscience*.

Hsu, M., Anen, C., & Quartz, S. R. (2008). The right and the good: distributive justice and neural encoding of equity and efficiency. *Science*, 320, 1092-1095.

Fri, Nov 1 Research Thought Paper Due by 5pm

Groups, Identity, and the "Self"

Tue, Nov 5 Chapter 9

Thu, Nov 7 Chapter 9 (continued)

Discussion Team #6

Cunningham, W. A., & Zelazo, P. D. Attitudes and evaluations: a social

cognitive neuroscience perspective. TICS, 11(3).

Van Bavel, J. J., Packer, D. J., & Cunningham, W. A. (2008). The Neural Substrates of In-Group Bias A Functional Magnetic Resonance Imaging

Investigation. Psychological Science, 19, 1131-1139.

Morality, Altruism, and Antisocial Behavior

Tue, Nov 12 Chapter 10

Thu, Nov 14 Chapter 10 (continued)

Discussion Team #7

Koenigs, M., Young, L., Adolphs, R., Tranel, D., Cushman, F., Hauser, M., & Damasio, A. (2007). Damage to the prefrontal cortex increases

utilitarian moral judgements. Nature, 446, 908-911.

Gazzaniga, M. S. (2011). Neuroscience in the courtroom. Scientific

American, 304, 54-59.

Tue, Nov 26 @ 3:00pm

FINAL EXAM