

PSYC 51: MIND AND BRAIN

Course Syllabus, Fall Term, 2013

MWF 10:00-11:05 a.m., 202 Moore Hall

Prof. Ming Meng, Office Hours: Th 2:00-3:00 p.m. and by appointment

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It is believed that the mind is a manifestation of the brain. Think of computers. The brain is hardware, the mind is software. Is it possible to understand algorithms of the software by investigating physical activity of the hardware? This course will take the mind and brain problem as a theme to guide discussions about neural underpinnings of various mental phenomena.

TEXTBOOK

1. Baars and Gage (2009) Cognition, Brain, and Consciousness, 2nd Ed. Academic Press.

2. There will be other assigned readings throughout the term that will complement the material in our textbook. These readings will be available on the PSYC 51 *Blackboard* webpage or handed out in class.

COURSE GOALS AND REQUIREMENTS

This is a 50s level topic course. Class participation and discussion are a very important component. We will have lectures to provide you with some background on a research topic. Moreover, you will team up with two or three other students. Each team will take turns to make presentations and lead in-depth discussions about a given topic. The goals of this course are threefold: a) to teach you research topics in cognitive neuroscience; b) to foster your ability to think critically about research (psychology and other); c) to build your teamwork skills.

1. Home assignments (10% of final grade).

2. Class attendance and attending office hours at least once (10% of final grade).

3. Midterm exam (20% of final grade).

4. In class discussions (20% of final grade).

A randomly chosen team will give a presentation (~30 minutes) about a given topic or a chapter in our textbook. After a brief discussion, each team in the audience will ask one question to the presenting team. Teams in the audience will grade the presenting team. Professor will take these grades into consideration when making final decisions about the presenting team's grade. Teams that make consistently reasonable evaluations will get bonus credits.

5. Final paper and oral defense (40% of final grade).

Maximum 12-15 pages, on a cognitive neuroscience topic chosen by yourself. It should be your own work and should be prepared specifically for this class. Whenever you make use of outside sources for findings, facts, language, or ideas (including web sites, books, articles, classmates, etc.) you must acknowledge them, in APA style when appropriate. If you are taking this class as a Neuroscience selective, you have to choose a Neuroscience topic.

6. Bonus credit opportunities.

There may be bonus credit opportunities announced in classes throughout the course. You may accumulate bonus credits up to 10% of final grade.

POLICIES

Honor Code: Students in PSYC 51 are expected to strictly adhere to the Dartmouth Academic Honor Principle. As described in the Student Handbook, fundamental to the principle of independent learning is the requirement of honesty and integrity in the performance of academic assignments, both in the classroom and outside. Dartmouth operates on the principle of academic honor. Students who submit work that is not their own or who commit other acts of academic dishonesty will forfeit the opportunity to continue at Dartmouth. If you have any questions or concerns regarding this policy during the course, please contact Professor Meng.

Students with disabilities: Students with disabilities, including “invisible” disabilities such as chronic illnesses and learning disabilities, are encourage to arrange for accommodations that might be helpful to them. Please meet with Professor Meng as soon as possible (preferably during the first week of the class) to discuss possible accommodations. All discussions will be held in the strictest confidence, although the Academic Skills Center may be consulted to verify documentation of the disability.

Religious Observance: Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with Professor Meng before the end of the second week of the term to discuss appropriate accommodations.

COURSE SCHEDULE (SUBJECT TO ADJUSTMENTS UPON NOTICES IN CLASS)**WEEK 1**

September 16 (M)	Introduction and Course Overview
September 18 (W)	The tools: Imaging the living brain
September 20 (F)	Build a play-doh model of the brain

WEEK 2

September 23 (M)	Perception I
September 25 (W)	Perception II
September 27 (F)	Perception III

WEEK 3

September 30 (M)	Chapter 7 & discussions
October 2 (W)	Chapter 8 & discussions
October 4 (F)	Chapter 9 & discussions

WEEK 4

October 7 (M)	Chapter 10 & discussions
October 9 (W)	Chapter 11 & discussions
October 11 (F)	Chapter 12 & discussions

WEEK 5

October 14 (M)	Attention & midterm review
October 16 (W)	MIDTERM EXAM
October 18 (F)	Memory

WEEK 6

October 21 (M)	Consciousness
October 23 (W)	Language
October 25 (F)	Chapter 13 & discussions

WEEK 7

October 28 (M)	Chapter 14 & discussions
October 30 (W)	Chapter 15 & discussions
November 1 (F)	Affective neuroscience

WEEK 8

November 4 (M)	Atypical mind and brain interactions
November 6 (W)	Mind and brain development
November 7 (Th) x-hour	Sleep and dreaming
November 8 (F)	NO CLASS (SFN)

WEEK 9

November 11 (M)	NO CLASS (SFN)
November 13 (W)	Guest lecture
November 14 (Th) x-hour	Oral defense
November 15 (F)	Oral defense

WEEK 10

November 18 (M)	Course wrap-up
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