

Mind, Brain, and Behavior

UN1010 / Course Syllabus / Spring 2018

When / Where

Mondays & Wednesdays, 2:40-3:55pm, Schermerhorn Hall 501

Instructor

Dr. Mariam Aly [ma3631@columbia.edu]

Office hours: Mondays, 4pm, Schermerhorn Hall 355D

TAs

TBA

Course website

The course website (on courseworks) contains the most up to date information. This syllabus is subject to change, so make sure to check the course website for the most current version, as well as announcements for changes in the schedule.

Bulletin description

An introduction to the biological approach to the experimental study of behavior. Includes consideration of the types of biological data relevant to psychology, as well as the assumptions and logic permitting the interpretation of biological data in psychological terms.

Course description

This course will provide a broad introduction to the intricate links between the mind, the brain, and behavior. You will first learn basics about brain anatomy and function, and about the methods used to study how the brain supports cognition and behavior. Then, we will explore the various functions of the brain by taking a journey from lower- to higher-level cognitive processes: we will study how we can sense and perceive the world, act in it, learn and think about it, and remember it.

Readings

Textbook: Brain and Behavior: A cognitive neuroscience perspective, by David Eagleman & Jonathan Downar. Oxford University Press, 1st Edition, 2015

Slides: You should come to class, but the slides will be made available on the course website

Any material in the readings is fair game for exams, as is any of the material covered in lectures. That said, the vast majority of each test will focus on material covered in the lectures, and the corresponding sections in the text book. I will post my slides on the course website so that they are available as a study aid, but they will not be a good resource on their own unless you come to class and take notes.

Grading

Exams: multiple choice, fill-in, and short answer questions (2 tests 25% each, final exam 50%)

Make-up exams: will be allowed only with written justification (e.g., by your doctor or advising dean). Make-up exams must be taken within one week after the exam, and cannot be taken before the actual exam.

Extra credit: participation in psychology experiments can earn you up to 6 credits, each worth 0.5% toward your final grade (max 3%)

My tests emphasize *understanding* and *critical thinking* rather than simple memorization. You should make sure to know key concepts and definitions, of course, but use those to scaffold a more comprehensive understanding of the material. For example, when you read about a study, make sure you understand *why* and *how* something happens, not just *what* happens.

Course Schedule*

Course Schedule*		
Date(s)	Topic	Readings
Jan 17	What’s this course about?	Chapter 1
Jan 22, Jan 24, Jan 29	How is the human nervous system organized, and how does it work?	Chapters 2-4
Jan 31, Feb 5	How do we see?	Chapter 5
Feb 7	How do we hear, feel, touch, and smell?	Chapter 6
Feb 12	Exam # 1	Chapters 1 – 6
Feb 14	How do we plan and control movement?	Chapter 7
Feb 19, Feb 21	How do we pay attention?	Chapter 8
Feb 26, Feb 28	What are the different kinds of memories?	Chapter 9
Mar 5	What happens during sleep?	Chapter 10
Mar 7	How do we produce and understand language?	Chapter 11
Mar 19	Review or catching up	
Mar 21	Exam # 2	Chapters 7 – 11
Mar 26, Mar 28	How do we make decisions?	Chapter 12
Apr 2, Apr 4	How does the brain create emotions?	Chapter 13
Apr 9, Apr 11	Why are some things rewarding?	Chapter 14
Apr 16, Apr 18	How do we understand other people?	Chapter 15
Apr 23, Apr 25	What happens when brain function is abnormal?	Chapter 16
Apr 30	Review or catching up	
TBA	Final Exam	Everything

** This is only a rough guide, and we may go faster or slower depending on questions asked in class and the difficulty the material poses on any given lecture. Any changes to this schedule will be announced in lecture and posted as an announcement on the course website.*

Additional course notes

Academic integrity

As a member of the academic community, one of your responsibilities is to uphold principles of honesty and integrity. This means that you can only present your own work on assignments and exams — plagiarism is strictly prohibited, as is presenting work as your own when it was done by someone else (e.g., a classmate or a friend). Doing so compromises your academic integrity and potentially your academic standing. If you feel like you are falling behind, don’t understand the material, or are not confident about your ability to take tests, talk to me as soon as possible instead of taking measures that go against principles of academic integrity. You can read more about this in Columbia’s Guide to Academic Integrity (<http://www.college.columbia.edu/academics/academicintegrity>).

Students with disabilities

If you are a student with special needs and require any type of accommodation, make an appointment with me before the first class to discuss your needs. You should also contact the office of Disability Services (<https://health.columbia.edu/disability-services>) before the first class to register for specific accommodations. If you have problems reading specific kinds of text (e.g., based on font or text size), please see me so I can make you exams (and a syllabus, and anything else you need) that you can more easily read.

Attendance and etiquette

It should go without saying that attendance is mandatory, and that you will need to come to class and take notes to do well on the exams. The slides are not a good enough resource on their own, and class is your main opportunity to get clarity on difficult concepts in the textbook. If you must miss a class, borrow notes from a classmate, read the chapter carefully, and come to me or the TAs with any questions.

Coming to class is meaningless if class time is spent inappropriately. Chatting with friends, watching videos online, and browsing social media are not appropriate activities for the classroom. Also, remember to silence your cell phone before class. Generally, eliminate distractions as much as possible to respect your classmates, as well as increase your chance of staying focused and learning the material during class.

Extra Credit

Participating in psychology experiments (via the experiment subject pool) can earn you up to 6 experiment credits (1 credit per 30 minutes of participation). Each experiment subject pool credit will count for 0.5% added to your grade as extra credit, for a total up to 3% added to your grade. Only 2 of those credits can be from online experiments; the rest must be from experiments done in person in a psychology lab.