

Psychology 180: Brain and Behavior. Section 001. Spring 2001. T/F 11:10-12:25 PM.  
Prof: Dr. Chris Braun. HN 606. 772-5554. [cbraun@hunter.cuny.edu](mailto:cbraun@hunter.cuny.edu)  
Hours: By appointment. Call or email.

**Text:** *An Introduction to Brain and Behavior*. B. Kolb and I.Q. Whishaw. 1<sup>st</sup> Edition, Worth Publishers. Available at Hunter College Bookstore.

There is a website for this book at: [www.worthpublishers.com/kolb/](http://www.worthpublishers.com/kolb/) I recommend you look at it. There are study aids, reviews and sample quizzes. Some of the questions on the in-class quizzes and exams will be taken directly from the website.

The textbook also comes with a CD-ROM that is pretty good. It has movies and animations of many of the concepts we will cover. You will find this very helpful, especially for the difficult topics like neuronal function and communication.

**Recommended:** *Study Guide to Accompany an Introduction to Brain and Behavior*. T. J. Bazzett. The bookstore will have several copies and more can be ordered.

**Course Description:** This course is an introduction to the biology of behavior. You will learn about the brain, behavior, and how Neuroscientists or Biologists study both. This course is intended to give the student an overview of nervous system organization and the biological basis of behavior. The course will cover topics ranging from the functioning of nerve cells to complex behaviors. This integrative approach will allow students to understand the physical basis of topics like personality and mental health, drug actions, sexual behavior, sleep, and consciousness.

**Attendance:** Students are expected to attend all classes, return all assignments on time, and be responsible for any announcements or material presented in all class sessions.

**Quizzes:** There will be a short quiz every week. It will be given either in the first or last 15 minutes of the class period. Quizzes are intended to give both instructor and students some idea of how things are going before it is too late. Many of the midterm and final questions will be repeated from the quizzes. A missed quiz is graded as a 0. There will be no quiz make-ups, but the lowest two scores will not count. **Quizzes will usually be scantron forms, so you will need a number 2 pencil. Please bring them to class, I will not supply them after the third quiz.**

**Exams:** In addition to the quizzes, there will two exams and a final. If there is a valid reason for missing the regular class period, a make-up may be taken. Make-up exams will be composed of a few essay questions. Any other missing exams (no valid excuse) will be graded as 0.

**Grading:** This course can not be taken CR/NCR. Final grades will be based on the quizzes and exams (Quizzes = 15%; Exams = 45%; Final = 40%). There will not be any extra credit opportunities.

**Academic Honesty:** All college rules are in effect. Don't cheat or lie. Cheating on quizzes or exams will result in a 0 for that assignment and possible disciplinary actions.

## Schedule of Topics and Readings (REQUIRED)

Unit	Date	Day	Topic	Readings
1	1/29	Tuesday	Introduction: What's a Brain?	
2	2/1	Friday	History. Do brains relate to behavior?	1-14; 36-47
3	2/5	Tuesday	Neurobiology I	48-72
4	2/8	Friday	Neurobiology II (the neuron)	76-102
	2/12	Tuesday	<i>No Class</i>	
5	2/15	Friday	Neurobiology III (membrane potentials)	112-131
6	2/19	Tuesday	Neurobiology IV (neuronal communication)	131-141; 153-163
7	2/22	Friday	Neurobiology V (neurotransmitters)	163-187
<b>8</b>	<b>2/26</b>	<b>Tuesday</b>	<b>Exam</b>	
9	3/1	Friday	Vision I	277-294
10	3/5	Tuesday	Vision II	295-314
11	3/8	Friday	Hearing I	318-332
12	3/12	Tuesday	Hearing II	332-347
13	3/15	Friday	Somatosense	380-394
14	3/19	Tuesday	Motor Control	355-380
<b>15</b>	<b>3/22</b>	<b>Friday</b>	<b>Exam</b>	
	3/26	Spring		
	3/29	Break		
16	4/2	Tuesday	Causes of Behavior	399-425
17	4/5	Friday	Sex and Hormones	226-230; 426-432
18	4/9	Tuesday	Drug Actions	190-210
19	4/12	Friday	Drugs and Behavior	211-225
20	4/16	Tuesday	Emotions and Mental Health	432-440; 587-600
21	4/19	Friday	Learning I (Memory)	488-510
22	4/23	Tuesday	Learning II (Plasticity)	176-186; 511-525
23	4/26	Friday	Development and Plasticity	259-273
24	4/30	Tuesday	Cognition and Intelligence I	529-549
25	5/3	Friday	Cognition and Intelligence II	549-571
<b>26</b>	<b>5/7</b>	<b>Tuesday</b>	<b>Exam</b>	
27	5/10	Friday	Evolution of the Brain and Human Behavior	12-32
28	5/14	Tuesday	Review	575-593

This schedule is tentative and may be adjusted over the course of the semester.

## Schedule of Topics and CD-ROM Sections (Highly Recommended)

There are notes in the margins of the text that refer to particular sections of the CD-ROM, but here are some reminders and suggestions.

Unit	Date	Day	Topic	CD-ROM section
1	1/29	Tuesday	Introduction: What's a Brain?	
2	2/1	Friday	History. Do brains relate to behavior?	
3	2/5	Tuesday	Neurobiology I	The Central Nervous System
4	2/8	Friday	Neurobiology II (the neuron)	Neural Communication: Structure of a Neuron
	2/13	<i>NO CLASS</i>		
5	2/15	Friday	Neurobiology III (membrane potentials)	Membrane Potentials; Conductance of the Action Potential; Synaptic Transmission; Neural Integration
6	2/19	Tuesday	Neurobiology IV (neuronal communication)	
7	2/22	Friday	Neurobiology V (neurotransmitters)	
<b>8</b>	<b>2/26</b>	<b>Tuesday</b>	<b>Exam</b>	
9	3/1	Friday	Vision I	Visual System
10	3/5	Tuesday	Vision II	
11	3/8	Friday	Hearing I	
12	3/12	Tuesday	Hearing II	
13	3/15	Friday	Somatosense	
14	3/19	Tuesday	Motor Control	Control of Movement
<b>15</b>	<b>3/22</b>	<b>Friday</b>	<b>Exam</b>	
	3/26	<i>Spring Break</i>		
	3/29			
16	4/2	Tuesday	Causes of Behavior	
17	4/5	Friday	Sex and Hormones	
18	4/9	Tuesday	Drug Actions	
19	4/12	Friday	Drugs and Behavior	
20	4/16	Tuesday	Emotions and Mental Health	
21	4/19	Friday	Learning I (Memory)	
22	4/23	Tuesday	Learning II (Plasticity)	
23	4/26	Friday	Development and Plasticity	
24	4/30	Tuesday	Cognition and Intelligence I	
25	5/3	Friday	Cognition and Intelligence II	
<b>26</b>	<b>5/7</b>	<b>Tuesday</b>	<b>Exam</b>	
27	5/10	Friday	Evolution of the Brain and Human Behavior	
28	5/14	Tuesday	Review	