

# Physiological Psychology (830:313:07)

## Syllabus, Summer 2015

*Mon - Thurs 10:10 – 12:00 in Wright Riemann Auditorium (Busch Campus)*

**Instructor:** Sara Norton, Behavioral & Systems Neuroscience Graduate Program

**Campus Location:** Room 232-b, Psychology Building, Busch Campus

**Office Hours:** Tuesday, 2:00 – 4:00, or by appointment

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### Textbook

*Physiology of Behavior*, 11th Edition; Neil R. Carlson; Pearson Publishers WITH MYPSYCHLAB

Course Description: This course addresses the biological basis of normal and abnormal behavior. The focus will be on the brain - its structure, chemistry and function. The course will deal with sensation, motivation, cognition, and emotion. We will also discuss psychiatric disease, neurodegenerative disease, and drugs of abuse.

### **Major Learning Goals**

After completing this course, students will know about the following:

1. The anatomical distinctions of the nervous system
2. How neurons release neurotransmitters and respond to chemical information
3. How information is stored and retrieved in the brain (the basis of learning and memory)
4. How the brain controls movement
5. How the brain organizes sensory information into perceptual experience
6. What genetic and biochemical factors determine psychiatric and neurological problems
7. What drives motivational behaviors, such as sex, sleep and food intake
8. How the defensive immunological activities of the body affect brain function

This is a fact-intensive course with an enormous amount of material to learn. It is a serious introduction to the field of Behavioral Neuroscience, and therefore, **a textbook is essential**. In addition, the MyPsychLab site run by Pearson is an excellent study environment connected to the book; this site will thoroughly prepare you for exams, provide you with quizzes and assignments, and reinforce your understanding of lecture material and what you read in the textbook. This is why there is an access code associated with the purchase of the book.

You have three main options for obtaining the textbook (through NJ Books or Barnes & Noble)

1. Hardbound copy with access code (to eText and MyPsychLab)
2. Loose-leaf copy with access code (to eText and MyPsychLab)
3. Access code (to eText and MyPsychLab - but no receipt of a physical copy of the book)

A few more options:

4. Rent the book (11th edition)
5. Obtain a used copy of the 11th edition or (only if you are saving huge bucks) a used 10th edition (do not go to the 9th edition)

If you choose options 4 or 5, you will not get the access code to MyPsychLab. Therefore, you will need to purchase this separately. An access code (that only gets you to the MyPsychLab site run by Pearson and NOT an eText, will cost \$42.50)

Lectures and Textbook: Lectures will adhere closely to the general contents of the textbook, which we will follow closely. Some sections of the textbook will be assigned as private reading, since time will not allow for all material to be covered

in class. Some lecture material will not come from the textbook. Therefore, class attendance is important. Lecture notes will be posted online.

## Assessment

Exams: (80% of total grade): There will be three exams. Exams 1 and 2 will be a mixture of written and multiple choice questions. The first exam will account for 20% of the total grade. Exam 2 will account for 25% of the total grade. The Final Exam will be all multiple choice and worth 35% of the total grade.

Quizzes: (20% of total grade): Quizzes will be set up on the MyPsychLab site associated with the textbook. Quiz results will count towards your final grade, but at the same time will serve to keep you up to date with your reading and lecture attendance. The quizzes for the week's material will be due at the end of each week (**each Friday at midnight**). You have two attempts to complete each quiz, and your final quiz score will be the average of your two attempts.

Extra Credit: Extra credit will be offered for participation in an IRB-approved Rutgers University psychology study. A list of studies is on the Sakai site. This list is not exhaustive, and if you wish to participate in an experiment that is not on the list, email me some information about the study so that I may add it to the list. Each hour of participation will earn you 3 extra credit points, with a maximum of 15 points. If you are uncomfortable or unable to participate in the listed RU studies, please come speak with me, and we will arrange an alternative extra credit opportunity. *I reserve the right to not accept extra credit from certain students, e.g., students who are consistently late or absent.*

## Grading System

Students will need to achieve predetermined cut-off points for grades of A, B+, and so on. Cut-off points will be as follows:

A, 90-100   B+, 87-89.9   B, 76-86.9   C+, 72-75.9   C, 60-71.9   D, 50-59.9   F, <50

## Makeup Exams

I verify all excuses for missing an exam. If you know ahead of time that you will be missing an exam (for a legitimate and verifiable reason, of course), you will be asked to take the exam before the exam date. If this is not possible, the makeup must be taken within three weekdays of the scheduled exam date. Makeup exams will NOT be exactly the same as the exams given on the scheduled date.

Rutgers athletic obligations, religious events, weddings etc that are going to interfere with taking the scheduled exams will require that you take the exam earlier than scheduled. It is up to you to anticipate the conflict, and let me know about these upcoming events so I can administer the exam earlier.

## Lecture Schedule

<u>Day</u>	<u>Date</u>	<u>Topic</u>	<u>Chapter</u>
Tues	May 26	Overview	1 (private reading; no lecture)
Wed	May 27	Neurons	2
Thurs	May 28	Neurophysiology	2
Mon	Jun 1	Neuroanatomy	3
Tues	Jun 2	Neuroanatomy	3
Wed	Jun 3	Neurotransmitters	4
Thurs	Jun 4	Psychopharm	4, 18
Mon	Jun 8	Psychopharm	4, 18
Tues	Jun 9	<b>Exam 1</b>	
Wed	Jun 10	Perception	6, 7
Thurs	Jun 11	Motor System	8
Mon	Jun 15	Neurological Disorders	15
Tues	Jun 16	Biological Rhythms	9
Wed	Jun 17	Sex & Reproduction	10
Thurs	Jun 18	<b>Exam 2</b>	
Mon	Jun 22	Ingestive Behavior	12
Tues	Jun 23	Learning & Memory	13
Wed	Jun 24	Emotion	11
Thurs	Jun 25	Anxiety & Stress	17
Mon	Jun 29	Psychoneuroimmunology	17
Tues	Jun 30	Mood Disorders, Schizo.	16
Wed	Jul 1	Optional Review	
Thurs	Jul 2	<b>Final Exam</b> (cumulative)	