

MACALESTER COLLEGE
NEUROSCIENCE STUDIES/PSYCHOLOGY 248
BEHAVIORAL NEUROSCIENCE
COURSE SYLLABUS

Neuroscience Studies/Psychology 248-01

Fall, 2016

M-W-F, 9:40-10:40 A.M. *And*

Th 1:20-4:30 P.M.

Instructor: Eric P. Wiertelak

Olin 324, x6111

Office Hours: 1:10-2:10 W-F or by appointment.

Course Description:

The nervous system and its structural and functional organization. Particular emphasis is given to the analysis of homeostatic regulation, motivation, emotion, learning, memory, and cognition. Participation in regularly scheduled laboratories is a component of the course. Prerequisite, Neuroscience Studies 180/Psychology 180 with lab, or Biology 163, 265, or 356, or permission of the instructor.

Texts

Required:

Physiology of Behavior 11th edition, by Neil Carlson.

The Man Who Mistook His Wife for a Hat, by Oliver Sacks.

Clinical Neuroanatomy Made Ridiculously Simple, by Stephen Goldberg (Lab).

Recommended:

Principles of Neural Science (5th edition), E.R. Kandel, J.H. Schwartz, and T.M. Jessell, eds. Although this text is not required, it is a highly valuable, comprehensive reference for this and any other courses in the field of neuroscience.

Stedman's Medical Dictionary or similar reference. Behavioral neuroscience, like medical science, employs biomedical jargon that is not found in Webster's or any other general dictionary. A good medical dictionary, online version or hardcover is worth the price.

Additional readings may also be required (library reserve) in both the lecture and laboratory components of the course.

Note: This syllabus is subject to revision by the instructor as needed in the course of the semester. The version posted on Moodle is the official version of the syllabus for this course.

Email Policy:

I am happy to correspond via email during regular business hours Monday-Friday. Students should check their syllabus first to see if the answer to their question is there before emailing, and will receive a response within 2 business days during regular business hours.

Office Hours: I am happy to meet with students for advising or to discuss their progress in the course during my office hours, or by scheduled appointment if needed.

Student Responsibilities:

Students are advised to read all assigned material prior to the class meeting for which the reading is assigned. Attendance at all class meetings is highly recommended, as examination material will come not only from the text and additional readings, but also classroom discussion and lecture material. The preceptors are available to assist students with all aspects of the course. When all else fails, ask your preceptor or the instructor!

•**Academic Accommodations:** Please contact the Office of Student Affairs at 651-696-6220 to schedule an appointment and discuss your individual circumstances.

•**Academic Integrity Policy:** Macalester College expects academic honesty from all students and faculty. I follow the college policy as detailed on the college website.

Course Format (and other) Notes:

Lecture/M-W-F sessions: I will follow the organization of the text closely, updating and expanding on topics as we go along. I will also depend on you to let me know what parts of the text require clarification. It is an excellent text, but a very dense one.

Laboratory: The laboratory component will be conducted during the Thursday afternoon sessions and will consist of several experiences, including one practical examination and a number of graded assignments. Laboratory begins next week! Details of lab assignments and evaluation will be provided during the first session.

General Notes: 1) The weekly quizzes will be a combination of essay, definitions, multiple choice, and matching. Quizzes may take place during either the class OR lab periods OR as Take-Home. Any deviations from this schedule (i.e., take-home quizzes) will be announced in class. 2) Legible handwriting is a must for all in-class assignments, so please write carefully. All out-of-class assignments are to be appropriately computer word-processed. Be forewarned that spelling, punctuation, and grammar will count in grading all assignments.

Evaluation:

1. Participation = 10% of final grade.

This portion of your grade will be based on **participation** in discussion, in both lecture and laboratory-- **and** the number and **quality** (see also "general notes" above) of "**Diary/Blog Entries**" completed. These entries should detail your opinions, thoughts,

and remaining questions on the topic(s) discussed during that class week, with the goal of allowing others to "get a glimpse" of your experience.

2. Laboratory = 20% of final grade.

This portion of grade will be based on the practical examination and completion of the assignments in each of the laboratory experiences. Requirements for this component of the course will be discussed in the laboratory meetings.

3. Project = 15% of final grade.

This portion of grade will be based on the research, development and production of a tested informational website related to the content of Chapters 16 and 17 in the text. Requirements for this component will be discussed in the class/laboratory meetings.

4. Quizzes = 55% of final grade.

The 10 highest scores out of all the weekly quizzes will be averaged and counted toward the final grade. As this grading policy may allow 2 to 3 quiz grades to be dropped, **no** make-up testing will typically be allowed. Should an emergency occur requiring absence from an quiz or multiple class sessions, contact the instructor's voice mail ASAP.

All grades will be calculated using the following scale:

	A =95.0% or higher	A- =91.6% to 94.9%
B+ =88.2% to 91.5%	B =84.8% to 88.1%	B- =81.4% to 84.7%
C+ =78.0% to 81.3%	C =74.6% to 77.9%	C- =71.2% to 74.5%
D+ =67.8% to 71.1%	D =64.4% to 67.7%	D- =61% to 64.3%
NC =60.9% and below		

Tentative Course Outline and Readings

Class Week	Topic	Chapter
8/31-9/9	Introduction to the course	1-2
	Cells of the nervous system	Sacks Intro.
	Note: Lab Starts 9/8	
9/12	Neuroanatomy	3, Sacks 21
9/19	Psychopharmacology	4, Sacks 16, 18
9/26	Research methods	5
10/3	Sensing I	7**, Sacks 1, 6
10/10	Sensing II(*)	7**, Sacks 8, 20
10/17	Vision/Exploration Week	6***
	Fall Break	
10/24	Movement(*)	8, Sacks 3, 4, 5
	Special LAB THIS WEEK	
10/31	Emotion	11
		Sacks 10, 11, 19
11/7	Learning & Memory	13
		Sacks 12, 17
11/14	Web Project Group Work	
	Human Communication I	14**
	(No Quiz this week!)	Sacks 9, 15
11/21	Human Communication II*	14**
	Thanksgiving Break	(Sacks 9,15)
11/28	Neurological Disorders	15
		Sacks 2,7
12/5	Mental Disorders	16**, 17**
		Sacks 13, 14, 22-24
		Final Projects Due by
		4:30 PM 12/13

*= Tentative take-home quiz. **= As Assigned, based on websites developed. ***Reference.