PHYSO 103 – INTRODUCTION TO NEUROSCIENCE
– FALL 2012 –

[Download Course Materials]

PHYSO 103—INTRODUCTION TO NEUROSCIENCE 3 Units

Also offered as PSYCH 103

Prerequisite: Satisfactory completion of PSYCH 101
Introduction to the biological basis of behavior. Emphasis on divisions of the nervous system, neuroanatomy, neurophysiology, psychopharmacology as applied to the understanding of perceptual processes, psychoactive drugs, movement, regulation of hunger and thirst, sexual behavior, sleep, learning and memory, language, emotion, reward and stress, psychopathology. Appropriate for all students interested in the behavioral and biological sciences. (A-F and P/NP) **Transfer** to
CSU,UC **General Education**: (MJC-GE:A) (CSU-GE: B2, B3) (IGETC: 5B)

Instructor David G. Ward, Ph.D.
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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
2:30-4:00 PM	10:00-11:00 AM	2:30-4:00 PM	10:00-11:00 AM	

Textbooks / Material Required:

Bear, M. F., Connors, B. W., and Paradiso, M. A. NEUROSCIENCE Exploring the Brain, Lippincott Williams and Wilkins, 2007.
http://www.lww.com/product/?978-0-7817-6003-4

Course Learning Outcomes: Students successfully completing PHYSO 103 will be able to:

1) Identify the major structures of neurons and explain the mechanism for synaptic communication using neurotransmitters.
2) Identify the sensory receptors responsible for sensations; explain how the nervous system is organized to process information and language.
3) Explain how the spinal cord and brain is organized to control skeletal movement and the activity of internal organs.
4) Explain the role of brain structures, neurotransmitters, and hormones in the control of hunger, thirst, sexual behavior, emotional behavior, sleep and waking, and mental illness.
5) Explain how the brain wires and rewires itself during embryonic and lifelong development and how the brain is able to remember and learn.

Grading: Grades are assigned based on points earned in written exams, research summaries, and a final exam, as follows:

1. 560 points - 7 written exams (80 points (50 points Scantron (882), 10 points fill-in, and 20 points short essays) each exam.
2. 40 points - 2 typed two page summaries of current research in neuroscience (based on 2 articles from peer reviewed journals, 20 points each.
3. 170 points – final exam (30 points last week of semester; 120 points comprehensive) (Scantron 884).
4. Exams cannot be made up.
5. Grade distribution:

- A: 90 -100% 693 - 770 points
- B: 80 - 89% 616 - 685
- C: 70 - 79% 539 - 608
- D: 60 - 69% 462 - 531
- F: 00 - 59% 000 - 454

The Academic Senate has created an academic integrity policy for students at MJC. This policy is part of the Student Code of Conduct.

> *"The grading of a student's work rests on the fundamental idea that an instructor is evaluating a student's own work, so cheating or plagiarism demonstrates a failure to complete this most basic requirement of any course. Thus a faculty member may administer academic consequences for violating the Academic Integrity Policy ranging from partial to no credit on an exam or assignment. The instructor may also consider that a student's violation of academic integrity should be a consideration for disciplinary measures, such as suspension or removal from the course or the college."*

Attendance: It is the responsibility of the student to drop a course that she / he are no longer attending. However, the instructor may drop a student after two consecutive days of non-attendance unless arrangements are made in advance. Avoid absences and leaving early.

Cell phones: Please turn off and do not use cell phones during class. Use of a cell phone during a quiz or exam will get you zero (0) points.

Eating and drinking are not permitted in the classrooms especially in the lab rooms.

Suggestions for success:

1. Use the course (chapter) outlines as the foundation for the course.
2. Study a small amount of material at a time; learn that material thoroughly before moving on to something new.
3. Draw pictures and diagrams of neuroanatomical structures and neurophysiological processes.
4. Establish study groups.