San José State University
(PSYC 129-01 LEC 28091)

(BIOL 129-01 LEC 29522)

Spring 2013 (Jan 24, 2012-May 16, 2012)

Instructor: Dr. Martine Godfroy-Cooper

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Cell: (650) 218-9505 Emergency only!

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martine.godfroy-1@nasa.gov (emergency)

Office Hours: Thursday, 5:00 - 6:00pm

Class Days/Time: Thursday/6:00PM-8:45PM

Classroom: Dudley Moorhead Hall (DMH) 356

Prerequisites: Psyc 001 (General Psychology) and
Psyc 030 (Introductory Psychobiology) or 3 units of Biological Science

Course Description

“Principles of brain structure organization and function underlying behavior. Topics include neural signaling, brain development and organization, physiology of the sensory systems, control of movement, and complex brain functions. Prerequisite: Either PSYC 030 and 3 units of biology, or 9 units of biology. Notes: Not acceptable as an elective in the Biology major.”

Course Goals and Student Learning Objectives

GE/SJSU Studies Learning Outcomes (LO), if applicable

Upon successful completion of this course, students will be able to:
CLO1 Analyze and summarize empirical research article in the field of Neuroscience.

CLO2 Learn to think “out of the box” by performing creative activities.

Course Content Learning Outcomes (CLO)
Upon successful completion of this course, students will be able to:

CLO3 Understand the issues and specificities associated to the study of the Nervous System

CLO4 Master the elementary knowledge associated to Neural Signaling, Sensory Processing, Motor Control, Brain Development and Regeneration and Complex Brain Functions.

Program Learning Outcomes (PLO)
Upon successful completion of the psychology major requirements…

PLO1 – Knowledge Base of Psychology – Students will be able to identify, describe, and communicate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

PLO2 – Research Methods in Psychology – Students will be able to design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.

PLO3 – Critical Thinking Skills in Psychology – Students will be able to use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.

PLO4 – Application of Psychology – Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues.

PLO5 – Values in Psychology – Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Required Texts/Readings

Textbook
PowerPoint presentations of the lectures will be provided on the Desire2Learn (D2L), San Jose State University's learning management system (sjsu.desire2learn.com).

Other Readings
http://thebrain.mcgill.ca/
Definition of a Credit Hour
Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

As an example, the expectation of work for a 3-credit course is 150-minutes of direct faculty instruction and six hours of out-of-class student work each week.

Classroom Protocol
Class content is not to consider as a “remake” of the textbook and I greatly encourage you to attend it. My goal is to highlight, develop and illustrate the fundamental aspects of the topic and to help you appropriate the notions and their possible outcomes in relation with your own problematic. I will try as possible to put you in the position of the observer and discover by yourself the mechanisms sustaining neural activity and its outcomes. Physical (and mental!) attendance is required (and will be potentially verified). Any unexcused absence could lead to class exclusion. Cell phone use (including texting) is not permitted. Computer use is limited to taking notes.

Recording of Class Lectures (Optional)
Common courtesy and professional behavior dictates that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. This permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

- Permission is granted upon oral approval of the instructor on a class-by-class basis.
- In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor-generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

Dropping and Adding
Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page at http://www.sjsu.edu/provost/Academic_Calendars/.
The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

Assignments and Grading Policy

Methods of evaluation

There will be two mid terms and a final exam. These exams will be a mix of multiple choice and short-answer essay questions. Assignments will be provided for most of the classes. Students will also be required to write a paper based on articles distributed in class. Requirements for the paper are as follows: (1) the paper is to be based on the given articles, (2) the paper should be two to four double-spaced, typed pages, and (3) the paper should be free of spelling and grammatical errors. Papers that are not typed or that contain an unacceptable amount of spelling and grammatical errors will be returned for rewriting. Late papers will be penalized at 10% per calendar day. The possibility to earn extra-credit will be provided by participating to experiments. Extra credit will allow you to reach the immediate superior final grade (A- if B+ for example). Attendance to the exams is mandatory. The dates for the mid-term exam will be announced in class at least two weeks in advance. The final exam will be on Thursday, May16th, 2013 from 17:15 to 19:30. A grade of 0 will be assigned for an unexcused absence from an exam unless prior arrangements have been made with me.

Final Grades assignment

There are 350 attainable points in this course (50 points for the assignments, two 50-points mid-term exam, a 100-points final exam and a 100 points paper). Course grades will be assigned as follows:

- A+ (≥97%)
- A  (93%-97%)
- A-  (90%-93%)
- B+ (87%-90%)
- B  (83%-87%)
- B- (80%-83%)
- C+ (77%-80%)
- C  (73%-77%)
- C- (70%-73%)
- D+ (67%-70%)
- D  (63%-67%)
- D- (60%-63%)
- F  (≤60%)

Furthermore, I encourage active participation in class, questions and discussions. Although I will not grade your participation per se, it will always be a helpful contribution to my evaluation of your understanding and interest for the course. Attendance per se shall not be used as a criterion for grading according to Academic Policy F-69-24 located at http://www.sjsu.edu/senate/F69-24.pdf. )
University Policies

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University’s Academic Integrity policy, located at http://www.sjsu.edu/senate/S07-2.htm, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU’s Academic Integrity Policy S07-2 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Disability Resource Center (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

Student Technology Resources

Computer labs for student use are available in the Academic Success Center at http://www.at.sjsu.edu/asc/ located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library.

A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

SJSU Peer Connections

The Learning Assistance Resource Center (LARC) and the Peer Mentor Program have merged to become Peer Connections. Peer Connections is the new campus-wide resource for mentoring and tutoring. Our staff is here to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. Students are encouraged to take advantage of our services which include course-content based tutoring, enhanced study and time management skills, more
effective critical thinking strategies, decision making and problem-solving abilities, and campus resource referrals.

In addition to offering small group, individual, and drop-in tutoring for a number of undergraduate courses, consultation with mentors is available on a drop-in or by appointment basis. Workshops are offered on a wide variety of topics including preparing for the Writing Skills Test (WST), improving your learning and memory, alleviating procrastination, surviving your first semester at SJSU, and other related topics. A computer lab and study space are also available for student use in Room 600 of Student Services Center (SSC).

Peer Connections is located in three locations: SSC, Room 600 (10th Street Garage on the corner of 10th and San Fernando Street), at the 1st floor entrance of Clark Hall, and in the Living Learning Center (LLC) in Campus Village Housing Building B. Visit Peer Connections website at http://peerconnections.sjsu.edu for more information.

**SJSU Writing Center**

The SJSU Writing Center is located in Suite 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center staff can be found at http://www.sjsu.edu/writingcenter/about/staff/.
The schedule is subject to change with fair notice be made available at least one week in advance.

Table 1 Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
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<tbody>
<tr>
<td>1</td>
<td>01/24/2013</td>
<td>Introduction to Neurosciences (part 1) Chapter 1</td>
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<tr>
<td>2</td>
<td>01/31/2013</td>
<td>Introduction to Neurosciences (part 2) Chapter 1</td>
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<td>Assignment 1 due</td>
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<td>3</td>
<td>02/07/2013</td>
<td>Electric Signaling of Nerve Cells (part 1) Chapters 2, 3</td>
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<tr>
<td>4</td>
<td>02/14/2013</td>
<td>Electric Signaling of Nerve Cells (part 2) Chapters 2, 3</td>
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<td>5</td>
<td>02/21/2013</td>
<td>Long Distance Signaling Chapter 4</td>
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<td>Quiz</td>
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<td>6</td>
<td>02/28/2013</td>
<td>Synaptic Transmission/Neurotransmitters and Their Receptors Chapter 5</td>
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<td>Study-Guide for Mid-term 1</td>
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<td>Assignment 2 due</td>
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<td>7</td>
<td>03/07/2013</td>
<td>Mid-Term 1</td>
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<td>8</td>
<td>03/14/2013</td>
<td>Sensation &amp; Sensory Processing (part 1) Chapters 9 to 15</td>
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<td>Assignment 3 due</td>
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<td>9</td>
<td>03/21/2013</td>
<td>Sensation &amp; Sensory Processing (part 2) Chapters 9 to 15</td>
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<td>Assignment 4 due</td>
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<td>10</td>
<td>03/28/2013</td>
<td>Spring Recess</td>
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<td>11</td>
<td>04/04/2013</td>
<td>Motor Control (part 1) Chapters 16,17</td>
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<td>Study Guide for Mid-term 2</td>
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<td>Assignment 5 due</td>
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<td>12</td>
<td>04/11/2013</td>
<td>Motor Control (part 2) Chapters 16,17</td>
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<td>Assignment 6 due</td>
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<td>13</td>
<td>04/18/2013</td>
<td>Early Brain Development (part 1) Chapter 22</td>
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<td>Assignment 7 due</td>
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<tr>
<td>14</td>
<td>04/25/2013</td>
<td>Early Brain Development (part 2) Chapter</td>
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<td>Week</td>
<td>Date</td>
<td>Topics, Readings, Assignments, Deadlines</td>
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<td>Assignment 8 due</td>
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<td>15</td>
<td>05/02/2013</td>
<td>Sex, Sexuality and the Brain Chapter 30</td>
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<td>Assignment 9 due</td>
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<td>16</td>
<td>05/09/2013</td>
<td>Study Guide final exam.</td>
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<td>Assignment 10 due</td>
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<td></td>
<td>Paper due date</td>
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<tr>
<td>Final</td>
<td>05/16/2013</td>
<td>DMH Room 356, 17:15 PM to 19:30 PM.</td>
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<td>Exam</td>
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