Description: Biopsychologists try to understand the biological basis for behavior and mental processes. They try to determine why people do what they do, and in some cases, help them change what they are doing. This discipline involves examining many aspects of human functioning—overt actions, mental processes, and emotional and physiological responses. Biopsychologists deal with the smallest of units, such as a single molecule or individual nerve cell. They also deal with large brain regions and interconnections between nervous, endocrine and immune systems. In this course, we will be covering a variety of topics, and the pace may be rather fast at times. Therefore, it is advised that you come to class!

Course Goals and Learning Outcomes: The goal of this course is to facilitate a basic understanding of neural mechanisms underlying behavior. By the end of the course, you should be able to describe activities of nerve cells as well as that of specific brain structures. You should also be able to describe and discuss complexities associated with specific sensory and motivational systems. A broad understanding of the biological basis of psychopathology is also an outcome of this course.

Finally, it is my goal that you gain a greater understanding of yourself and others, and that you become fascinated with biopsychology, even if you think you hate biology!


Requirements: The requirements for this class include four quizzes and three examinations (two midterms and a final). Each quiz is worth about 9% of your grade, and the midterm examinations each count 22% toward the final grade. The final exam will be worth 20%. It is strongly recommended that students take every advantage to earn bonus points. They will be offered throughout the semester.

The format for quizzes and midterms is objective (multiple choice, true/false, identify, match) and short answer.
Quizzes are to be completed at home, which means that you will be on your honor when you take them. You may use your text, or other written sources, but you may not consult with other persons. Quizzes will be available (online) on Mondays, and they will be due on the following Wednesday. Midterm exams are scheduled for every other week. The final exam date is scheduled for Wed. 7/6 @ 10:00AM. A brief review for the final exam will precede the exam, beginning at 9:00AM on 7/6.

**Extra Credit Points:** A maximum of 8 extra credit points may be earned by attending research presentations, either professional conferences or departmental (Psychology or Biology Departmental sponsored). To receive credit, you must write a brief summary (1 page maximum) of each presentation (Due 7/6). All summaries are to be typed (double-spaced) with a title page referencing presentation. Point value per activity will be determined in advance by the professor. There may also be extra credit opportunities in class.

**Grading:** Due to the fast-paced nature of this course, there will be no early, late, or make-up exams or quizzes. Please check your schedule to ensure that you have no conflicts with the test dates. However, if you have a written medical excuse for missing an exam, a makeup exam will be given within a week of the missed exam, or at the discretion of the instructor.

**Classroom Protocol:** To succeed in this course, attendance is critical. You should come prepared for class discussions with a completion of course readings. Students are also expected to maintain a level of professional and courteous behavior at all times.

**Cell phones and other electronic devices:** You are to turn off cell phones and other electronic devices before the beginning of class. You may use a laptop to take notes during the lecture; however, if you are using your laptop for purposes other than taking notes for Psyc 30, you will be asked to leave your laptop at home for the remaining semester.

**Communication with instructor:** Use email, office hours, or class time. I will respond to emails M-F 9:00 – 5:00.

**Faculty Web Page and MYSJSU Messaging:** Copies of the course materials such as the syllabus, major assignment handouts, etc. may be found on my faculty web page at http://www.sjsu.edu/people/cheryl.chancellor-freeland/, or accessible through the Quick Links>Faculty Web Page links on the SJSU home page.

**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 located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. 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/.
procedures about add/drops, academic renewal, fee payment, withdrawal and so forth. These are listed under: http://info.sjsu.edu/home/schedules.html

**University Policies**

**Academic integrity:** Academic integrity is essential to the mission of San José State University. As such, students are expected to perform their own work (except when collaboration is expressly permitted by the course instructor) without the use of any outside resources. Students are not permitted to use old tests, quizzes when preparing for exams, nor may they consult with students who have already taken the exam. When practiced, academic integrity ensures that all students are fairly graded. Violations to the Academic Integrity Policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for oneself, fellow students and the course instructor and can ruin the university’s reputation and the value of the degrees it offers. The Student Conduct and Ethical Development website is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Violators of the Academic Integrity Policy will be subject to failing this course and being reported to the Office of Judicial Affairs for disciplinary action which could result in suspension or expulsion from San José State University.

The following URL will take you to the SJSU library’s plagiarism tutorial. If you have not yet completed this, it is worth your while to do so: http://tutorials.sjlibrary.org/plagiarism/index.htm

**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 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 located on the 1st floor of Clark Hall and on the 2nd floor of the Student Union. 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 digital and VHS camcorders, VHS and Beta video players, 16 mm, slide, overhead, DVD, CD, and audiotape players, sound systems, wireless microphones, projection screens and monitors.

**Learning Assistance Resource Center:** The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The LARC website is located at http://www.sjsu.edu/larc/.
The following is to provide a quick summary of important course events. I have also included a brief description of the learning outcomes for each section. You may find this, along with the study guides, useful when preparing for quizzes and exams. A detailed schedule of events is also provided, but this may be modified as instructor deems necessary. You are responsible for noting any changes that may occur during the semester.

Summary of Events

Quiz 1  
Date: Monday 6/6 (Due 6/8)  
Lectures: 6/6  
Outcomes:  
• Describe the mind/body issue.  
• Demonstrate a clear understanding of structure and function of the CNS.  
• Understand invasive and noninvasive methods for investigating brain function

Quiz 2  
Date: Monday 6/13 (Due 6/15)  
Lectures: 6/8, 6/13  
Outcomes:  
• Demonstrate an understanding of action potentials, resting potentials, and postsynaptic potentials  
• Be able to explain how specific agonists and antagonists interact with neurotransmitter systems to affect behavior

Midterm I  
Date: Wednesday 6/15  
Lectures: 6/6 - 6/13  
Chapters: Chapters 1-4  
Outcomes:  
• Demonstrate a complete understanding of the functioning of the neuron: electrophysiological and chemical properties; interneuronal communication; principles of drug effects on neuronal.  
• Be able to identify major structures and function of the brain.  
• Understand some general methods for investigating brain and behavior.

Quiz 3  
Date: Monday 6/20 (Due 6/22)  
Lectures: 6/15, 6/20  
Outcomes:
- Basic understanding of nonvisual sensation and perception (e.g., how the physical energy is translated into neural energy)
- Be able to describe how somatosensation is processed.
- What makes you eat and sleep?

**Midterm II**

Date: Monday, 6/27
Lectures: 6/15 – 6/22
Chapters: Chapters 5-7, 11,
Outcomes:
- Basic understanding of nonvisual sensation and perception (e.g., how the physical energy is translated into neural energy)
- An understanding of sleep
  - Be able to identify components of the visual system, and describe how vision occurs.
  - Be able to describe how agonists, antagonists and specific drugs interact with neurotransmitter systems to affect behavior.
  - Identify factors associated with addiction
- Basic understanding of brain development and brain plasticity.

**Quiz 4**

Date: Monday 6/27 (Due Wednesday 6/29)
Lectures: 6/27
Outcomes:
An understanding of stress response and of the biological basis of emotion.
Understanding of memory and learning processes.
Be able to describe LTP.

**Final Exam**

Date: Wednesday 7/6 @10:00AM.
Lectures: All
Chapters: All reading with particular focus on material following Midterm II

*Please note:* Quizzes will be take-home tests. This means you are on your honor when taking these quizzes. Your time is unlimited; however, you may not discuss the questions or responses with other individuals. Collaborative work will result in a zero for all. All quizzes are to be turned in to the instructor within the first 10 minutes of lecture.
### Performance Outcomes and Associated Points

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Approximate percent</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Quizzes (4)</td>
<td>9% each</td>
<td>27 each (108 total)</td>
</tr>
<tr>
<td>Midterms (2)</td>
<td>22% each</td>
<td>68 each (136 total)</td>
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<tr>
<td>Final</td>
<td>20%</td>
<td>56</td>
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#### Grading Scale (300 points)

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<tr>
<th>Total Points</th>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>269 – 300</td>
<td>90 – 100</td>
<td>A</td>
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<tr>
<td>239 – 268</td>
<td>80 – 89</td>
<td>B</td>
</tr>
<tr>
<td>194 – 238</td>
<td>65 – 75</td>
<td>C</td>
</tr>
<tr>
<td>150 – 193</td>
<td>50 – 64</td>
<td>D</td>
</tr>
<tr>
<td>149</td>
<td>less than 50</td>
<td>F</td>
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</tbody>
</table>

### Tentative Schedule of Events (subject to change with fair notice):

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Reading/Lecture Topic</th>
<th>Daily Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6/6</td>
<td>Chapter 1: Intro&lt;br&gt;Course Expectations&lt;br&gt;Chapter 2: Anatomy of the Nervous System</td>
<td>Quiz 1</td>
</tr>
<tr>
<td></td>
<td>6/8</td>
<td>Chapter 2: Anatomy of the Nervous System&lt;br&gt;Chapter 3: Cells of the Nervous System&lt;br&gt;Action Potentials and Synapses</td>
<td>Quiz 1 due</td>
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<tr>
<td>2</td>
<td>6/13</td>
<td>Action Potentials and Postsynaptic Potentials&lt;br&gt;Chapter 4: Psychopharmacology</td>
<td>Activity&lt;br&gt;Quiz 2</td>
</tr>
<tr>
<td></td>
<td>6/15*</td>
<td>Psychopharmacology contin.&lt;br&gt;Chapter 5: Development of the Human Brain</td>
<td>Midterm I: Chapters 1-4&lt;br&gt;Quiz 2 due</td>
</tr>
<tr>
<td>3</td>
<td>6/20</td>
<td>Chapter 6: Vision&lt;br&gt;Chapter 7: Nonvisual Sensation Mechanoreceptors</td>
<td>Quiz 3</td>
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<tr>
<td></td>
<td>6/22</td>
<td>Chapter 7: Nonvisual Sensation Mechanoreceptors&lt;br&gt;Chapter 11: Sleep/Waking</td>
<td>Quiz 3 due</td>
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<tr>
<td>4</td>
<td>6/27*</td>
<td>Chapter 12 Memory&lt;br&gt;Chapter 14: Emotion, Aggression, Reward, and Stress</td>
<td>Midterm II (Chapters 5-7, 11)&lt;br&gt;Quiz 4</td>
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<tr>
<td>Date</td>
<td>Event</td>
<td>Notes</td>
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<td>6/29</td>
<td>Chapter 16: Psychological Disorders/ Summing up</td>
<td>Quiz 4 due</td>
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<td>5</td>
<td>7/4</td>
<td>NO CLASS</td>
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<tr>
<td>Final Exam</td>
<td>Wed.7/6</td>
<td>Review before exam.</td>
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<td>Final Exam: 10:00AM-All lectures, all chapters</td>
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<td></td>
<td></td>
<td>Final bonus point materials due</td>
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