San José State University  
Department of Psychology  
PSYC 30 – Introduction to Psychobiology  
Section 01 – Spring 2019

Course and Contact Information
- Instructor: Christian La, PhD
- Office Location: DMH 232
- Email: christian.la@sjsu.edu
- Office Hours: Monday 6:00 – 7:00pm (after class)
- Class Days/Time: Monday 3:00pm – 5:45pm
- Classroom: (Building and room number, or your online course web address)
- Prerequisites: BIOL 21 or BIOL 65 (Human Biology)

Course Format
Course material will be presented through in-class lectures, assigned readings, and assigned homework. Reading material from the textbook is meant to compliment lecture material, but do not serve as a substitution. As such, attendance is essential to the student’s understanding of the course material. Students are expected to be proactive about their learning, adequately preparing for lectures, asking questions, and attending office hours. Students in this class are expected to review the lecture slides prior to class.

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas Learning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU at http://my.sjsu.edu (or other communication system as indicated by the instructor) to learn of any updates.

Course Description
Psyc 30 – Introduction to Psychobiology: Biological approaches to understanding behavior: evolutionary, genetic, neural and hormonal influences on normal and abnormal behavior.

This class explores the biological basic of cognition and behavior. This course examines the structural and functional components of the nervous systems, from the cellular level to the system level, and will consider how information from the internal and external environment can direct and influence adaptive behavior.

Course Goals
Upon completing this course, the student will acquire a basic understanding of how biological processes influence behavior.
Course Learning Outcomes (CLO) (Required)

Upon successful completion of this course, students will be able to:

**Content**
- CLO1 – Describe what is Psychobiology/Biopsychology, and why we study it.
- CLO2 – Describe the basic electrical and chemical properties of the neuron
- CLO3 – Describe basic brain anatomy, major cortical divisions, and their functions
- CLO4 – Describe our various sensory systems and motor system
- CLO5 – Describe what is brain plasticity, in development, aging, and disease

**Critical thinking**
- CLO6 – Able to relate lecture topics to the understanding of the ‘self’

**Communication**
- CLO7 – Able to present and discuss recent original article
- CLO8 – Able to write about/comment on a recent original article

Required Texts/Readings (Required)

**Textbook**
Biopsychology — 10th edition by John P.J. Pinel (Publisher: Pearson)
ISBN-10: 0134203690

[9th edition of the textbook is also acceptable]

**Other Readings**

Regular research articles will be provided by the instructor and will be made available on Canvas. The research article for the end of semester assignment will be selected by the student themselves.

Course Requirements and Assignments (Required)

- Lecture slides will be available on Fridays on Canvas, and are meant to be reviewed before class.

- There will be 3 exams (one for each of the sections):
  1) Neurobiological basis of Neuroscience/Biopsychology
  2) Cognitive systems
  3) Plasticity

- Each student is allowed ONE exam retake during the semester. Notice of the retake has to be made by the student before the end of Wednesday following the scheduled exam. The retake is to be taken the following week during office hours. (NO OTHER retake will be allowed for any reason)

- Final exam will be cumulative, but will only comprise of questions the exams.

In addition:
- 6 clinical case summaries (2 per section)
- 5 quizzes (random)
- Reflective minute questions at the end of each class session.
- Research article is end-of-semester project. It consists of 2 parts: 1) group oral presentation, 2) individual written report. More instructions will be provided later.
- Office hour: each student is expected to attend at least 1 office hour over the course of the semester.
Exams & Assignments Structure:
- *Exams* will consist of a mixture of multi-choice, short-answers, and essay questions, and will be administered over the 2nd hour of class.
  1. No study guide will be provided, but review sessions will be arranged to the best of my ability
  2. No office hours the day of exams
- *Exam Questions submission* allows you submit exam questions you deem fair for credit (4 MC questions, 1 essay question, with answers)
- *Research Article presentation/discussion* consists of 2 parts:
  1. an oral presentation (group of 3-4)
  2. a written report (individual, 3-page single-spaced - 1500 words).
- *Clinical Case Summaries* consist of short summary of a clinical case presented in the book to which you have connected with the most. Describe what the case was, and why you picked it (500 words).

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

### Grading Information

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Exam</td>
<td>3x 100</td>
<td>≥ 93</td>
<td>A</td>
</tr>
<tr>
<td>Exam questions submission</td>
<td>3x 15</td>
<td>92 - 90</td>
<td>A-</td>
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<tr>
<td>Final exam</td>
<td>1x 150</td>
<td>89 - 88</td>
<td>B+</td>
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<tr>
<td>Clinical case</td>
<td>6x 10</td>
<td>87 - 83</td>
<td>B</td>
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<tr>
<td>Quiz</td>
<td>5x 10</td>
<td>82 - 80</td>
<td>B-</td>
</tr>
<tr>
<td>Reflective minute question</td>
<td>10x 5</td>
<td>79 - 78</td>
<td>C+</td>
</tr>
<tr>
<td>Research article presentation (group)</td>
<td>1x 30</td>
<td>77 - 73</td>
<td>C</td>
</tr>
<tr>
<td>Research article report (individual)</td>
<td>1x 50</td>
<td>69 - 63</td>
<td>D</td>
</tr>
<tr>
<td>Office hour visit</td>
<td>1x 15</td>
<td>≤ 62</td>
<td>F</td>
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</table>

Total points possible 750pts

This course must be passed with a C or better as a CSU graduation requirement

### Classroom Protocol

Students are expected to maintain a level of professional and courteous behavior at all times. You are required to silence your cell phones and other electronic devices before the beginning of class. **Note that although laptops are permitted, they are to be used for note-taking purposes only.** Students not abiding by these policies will be asked to leave the class and will not be permitted to use their devices for the remainder of the semester.
University Policies (Required)

Per University Policy S16-9 relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/”.
# Tentative Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01/28</td>
<td>Class Intro and Neuroscience Basics Misconception</td>
<td>Reading: Assignment:</td>
</tr>
<tr>
<td>2</td>
<td>02/04</td>
<td>Biology Review – the neural unit</td>
<td>Reading: Assignment: <a href="https://www.youtube.com/watch?v=gvX5ao5SCjE">https://www.youtube.com/watch?v=gvX5ao5SCjE</a></td>
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<tr>
<td>3</td>
<td>02/11</td>
<td>The Neural Unit – Part II</td>
<td>Reading: Ch 5</td>
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<tr>
<td>4</td>
<td>02/18</td>
<td>Research Method to Biopsychology</td>
<td>Reading: Assignment: Ch 4</td>
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<tr>
<td>5</td>
<td>02/25</td>
<td>Methods (cont’d) Review</td>
<td>Reading: Assignment: exam questions</td>
</tr>
<tr>
<td>6</td>
<td>03/04</td>
<td>Sensorimotor system</td>
<td>Reading: Assignment: Exam 1</td>
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<tr>
<td>7</td>
<td>03/11</td>
<td>Sensorimotor (pt. 2) Visual system</td>
<td>Reading: Assignment: Ch 8</td>
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<tr>
<td>8</td>
<td>03/18</td>
<td>Visual system</td>
<td>Reading: Assignment: Ch 6</td>
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<td>9</td>
<td>03/25</td>
<td>Olfactory, Gustatory Review</td>
<td>Reading: Assignment: Ch 7</td>
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<td>10</td>
<td>04/01</td>
<td>No Class</td>
<td>Reading: Assignment: Exam 2</td>
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<td>11</td>
<td>04/08</td>
<td>Neuroplasticity 1 (Development, Learning &amp; Memory)</td>
<td>Reading: Assignment: Ch 11</td>
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<td>12</td>
<td>04/15</td>
<td>Neuroplasticity 2 (Aging, AD)</td>
<td>Reading: Assignment: Ch 10</td>
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<tr>
<td>13</td>
<td>04/22</td>
<td>Neuroplasticity 3 (PD, HD, Stroke, Tumor)</td>
<td>Reading: Assignment: Ch 12</td>
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<td>14</td>
<td>04/29</td>
<td>Review Guest Lecture</td>
<td>Reading: Assignment: exam questions</td>
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<tr>
<td>15</td>
<td>05/06</td>
<td>Working on Group Presentations</td>
<td>Reading: Assignment: Exam 3</td>
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<td>16</td>
<td>05/13</td>
<td><strong>COURSE REVIEW</strong></td>
<td>Assignment: Scientific Article Report</td>
</tr>
<tr>
<td>16</td>
<td>05/20</td>
<td>No Lecture</td>
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