San José State University  
Department of Psychology

PSYC 121B – Advanced Research Methods: Cognition/Perception Laboratory  
Spring 2019 Course Syllabus

Instructor: Dr. Cary S. Feria  
Office Location: DMH (Dudley Moorhead Hall), Room 312  
Telephone: (408) 924-5620  
Email: cary.feria@sjsu.edu  
Office Hours: Tuesday 10:20-11:10am; Thursday 11:30am-12:20pm  
You are welcome to schedule an appointment with me for a different time, if you are unable to make these times.

Class Days/Time:  
Lecture Section 20: Monday 10:30-11:30am  
Lab Section 21: Monday 11:45am-2:45pm  
You must be registered both in the lecture (section 20) and in the lab (section 21).

Classroom: DMH 236  
Prerequisites:  
Prerequisite: PSYC 1, STAT 95, PSYC 100W, plus any one of: PSYC 135, PSYC 155, or PSYC 158.  
Pre/Corequisite: PSYC 120 must be taken either before, or concurrently with, this course.

Course Description

SJSU Course Catalog Description: Advanced treatment of research approaches used in Cognition and/or Perception. The primary focus of the course is on traditional laboratory experimental designs and methods. Laboratory-based data collection and analysis facilitate experiential learning. Prerequisite: PSYC 001, STAT 095, PSYC 100W, plus any one of: PSYC 135, PSYC 155, or PSYC 158. Pre/Corequisite: PSYC 120 must be taken either before, or concurrently with, this course. Misc/Lab: Lecture 1 hour/lab 3 hours.

Specific Course Description: The primary purpose of this class is to engage students in perception research. You will gain knowledge of the methodologies used to perform research in perception, and how to analyze and interpret the results. Course lectures will provide a background in the foundations of research design in perception. During laboratory sections, you will gain hands-on experience carrying out common research methods in perception and statistically analyzing the resulting data. You will also work in a group to develop an idea for an original perception study, design and conduct your study, analyze its results, and report the results in written and oral formats.

Learning Outcomes

Course Learning Outcomes (CLO)  
Upon successful completion of this course, students will be able to:
CLO1 – Understand the experimental methods that are used to study perception.
CLO2 – Use experimental evidence as a tool for critically assessing theories about perception.
CLO3 – Read and understand journal articles in perception.
CLO4 – Synthesize several research studies and draw conclusions, in written format.
CLO5 – Design and conduct an independent, original perception research study.
CLO6 – Use statistics to interpret the results of research studies.
CLO7 – Write a report of research findings according to APA style.
CLO8 – Give a professional oral presentation of research findings.

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.

Recommended Texts/Readings
Textbook
Course Requirements and Assignments

Lab Reports:
In class, you will perform research studies giving you hands-on experience with the type of research that is carried out in the field of perception. After performing each study, you will analyze the results of the study, and do a written assignment about it. Because each assignment requires participation in the lab activities, attendance is mandatory. If you are absent on the day that we perform the study or the day that we analyze the study, you cannot receive credit for the assigned work from that day. In some cases, you may also be responsible for completing some of the data collection outside of class time. Each lab activity will include instructions about the product (calculations, graphing, write-up, etc.) that should be turned in.

There will be 2 lab reports over the course of the semester. You will lose 10% of the point value of a lab report for each day it is late. If the assignment is returned to the class before you hand in your lab report, you will receive no credit. Lab reports will be turned in by each student individually. (aligned with CLO 1, 2, 6; PLO 2, 3, 5)

Quiz:
There will be one quiz, covering lecture material. The quiz will be mostly multiple-choice, but may also include short-answer and diagrams. The quiz is closed-book and closed-notes. A study guide will be given out before the quiz. (aligned with CLO 1; PLO 1, 2)

Research Ethics Tutorial:
You will complete an online training course about human subjects research ethics. This is the same training course that the IRB requires researchers to complete when applying to do research. (aligned with CLO 1; PLO 5)

Project:
In small groups, you will conduct an original research study, of your choosing, from beginning to end. You will decide on a topic of investigation, conduct a literature review of the issue, design your study, conduct the study, analyze the data, write a paper, and give an oral presentation of your research to the class. The progression of your project will be divided into 6 Project Steps. The project schedule on page 8 of this syllabus gives the due dates for each step. Most of the steps of the project will be completed in groups, but writing the data analysis and the final paper will be done individually. For most of the steps, you will lose 10% of the point value of the step for each day that it is late. However, the oral presentation must be completed on time, and cannot be accepted late. Further information on the project will be provided later. (aligned with CLO 1, 2, 3, 4, 5, 6, 7, 8; PLO 2, 3, 5)

Participation in Classmates’ Studies:
Project groups will conduct their studies during class time (see schedule on page 8 of this syllabus) as well as outside of class, thus classmates are an important source of study participants. For this reason, it is important that every student participate in every other group’s study. Your grade will be determined by the number of studies that you participate in, out of the available studies. For example, if there are 5 studies performed in class, and you participate in 4 of them, your participation grade would be 4 points. If it turns out that there is not sufficient time for everyone to participate in all the studies, then this grading scheme may be modified. (aligned with CLO 1)

Overall Course Participation:
Because this course is laboratory-intensive and because you will be working on your project in groups, it is important that you consistently participate in all aspects of the class. The overall course participation grade will be based on several areas: (a) Participation in in-class activities, exercises, and experiments. Grading will be based on your thoroughness and timeliness in completing these activities. (b) Active
participation in class discussions. Grading will be based on your speaking up with relevant contributions during lecture and lab activities. (c) Participation/contribution to your group research project. Grading includes participating in group work time, and utilizing that time constructively. (aligned with CLO 1, 2, 5, 6; PLO 2, 3, 5)

**Grading Information**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
<th>Grade</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Ethics Tutorial</td>
<td>5</td>
<td>1.7%</td>
<td>individual</td>
</tr>
<tr>
<td>Lab Report 1</td>
<td>30</td>
<td>10%</td>
<td>individual</td>
</tr>
<tr>
<td>Lab Report 2</td>
<td>30</td>
<td>10%</td>
<td>individual</td>
</tr>
<tr>
<td>Quiz</td>
<td>30</td>
<td>10%</td>
<td>individual</td>
</tr>
<tr>
<td>Project Step 1 (Idea Summary)</td>
<td>5</td>
<td>1.7%</td>
<td>group</td>
</tr>
<tr>
<td>Project Step 2 (Proposal Worksheet)</td>
<td>25</td>
<td>8.3%</td>
<td>group</td>
</tr>
<tr>
<td>Project Step 3 (IRB Protocol)</td>
<td>25</td>
<td>8.3%</td>
<td>group</td>
</tr>
<tr>
<td>Project Step 4 (Data Analysis)</td>
<td>15</td>
<td>5%</td>
<td>individual</td>
</tr>
<tr>
<td>Project Step 5 (Final Paper)</td>
<td>90</td>
<td>30%</td>
<td>individual</td>
</tr>
<tr>
<td>Project Step 6 (Oral Presentation)</td>
<td>25</td>
<td>8.3%</td>
<td>group</td>
</tr>
<tr>
<td>Participation in Classmates’ Studies</td>
<td>5</td>
<td>1.7%</td>
<td>individual</td>
</tr>
<tr>
<td>Overall Course Participation</td>
<td>15</td>
<td>5%</td>
<td>individual</td>
</tr>
<tr>
<td><strong>Total possible</strong></td>
<td>300</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Final course grades will be based on the scale below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A plus</td>
<td>97% or higher</td>
</tr>
<tr>
<td>A</td>
<td>93 to 96%</td>
</tr>
<tr>
<td>A minus</td>
<td>90 to 92%</td>
</tr>
<tr>
<td>B plus</td>
<td>87 to 89%</td>
</tr>
<tr>
<td>B</td>
<td>83 to 86%</td>
</tr>
<tr>
<td>B minus</td>
<td>80 to 82%</td>
</tr>
<tr>
<td>C plus</td>
<td>77 to 79%</td>
</tr>
<tr>
<td>C</td>
<td>73 to 76%</td>
</tr>
<tr>
<td>C minus</td>
<td>70 to 72%</td>
</tr>
<tr>
<td>D plus</td>
<td>67 to 69%</td>
</tr>
<tr>
<td>D</td>
<td>63 to 66%</td>
</tr>
<tr>
<td>D minus</td>
<td>60 to 62%</td>
</tr>
<tr>
<td>F</td>
<td>59% or lower</td>
</tr>
</tbody>
</table>

**Extra Credit Opportunity: Research Review Paper**

You may choose to write a research review paper (4-6 pages) on a topic of interest to you for extra credit. The paper should focus on a specific topic within sensation and perception. The paper should discuss at least 6 references, at least 5 of which must be articles from scientific research journals. The extra credit paper topic you choose may **not** be related to your project topic for this course. If you choose to write a paper, you need to have your topic approved by me **no later than Thursday April 18**. Depending on the quality of the paper, you may receive up to 8 bonus points. The paper must be submitted to turnitin.com (a website that checks for plagiarism) as well as turning in a printed copy to me. The paper must be turned in before the final exam.
Classroom Protocol

Group Participation
Active participation in your lab group is required. At many lab sections students will be working in their groups on their projects, and groups will be doing work outside of class as well. If you are not sufficiently contributing to group work, it may result in a reduction of your (individual) grade on your proposal worksheet, IRB protocol, and/or oral presentation.

Getting Help
If you are having difficulties with any aspect of this course, please come to my office hours, and I will do my best to help you. If you are unable to come to my office hours, you can contact me to make an appointment for a different time. If you have just a short question, you also can send it to me by e-mail.

Attendance
Missed Classes. If you are absent, you should consult a classmate to get the lecture notes and to find out about any announcements made in class. You should also contact your project group, and contribute to the group work.

Missed Quizzes. I strongly discourage make-up quizzes. No make-up quizzes will be given unless the student presents a valid excuse. I reserve the right to decide if the excuse is valid. I will be more likely to allow you to make up a quiz if you make every effort possible to contact me before the scheduled date of the quiz. The fastest way to contact me is often by e-mail.

Canvas
Lecture slides, quiz grades, article readings, and other materials will be posted on the course Canvas website. Please do not email me through Canvas – email me at cary.feria@sjsu.edu instead.

Turnitin.com
Students will be required to turn in certain papers (as specified by the instructor) to turnitin.com, in addition to submitting a printed copy to the instructor. This website will check your paper for plagiarism.

Checking Your Email Account
I will from time to time send email messages to the class, using your email address listed in MySJSU.

Class Courtesy
- Cell phones are not permitted in class. Please turn off your cell phone and put it away in your backpack prior to entering the classroom.
- If you must arrive late or leave early, please do so quietly and with a minimum of distraction.

Cell Phone/Exam/Quiz Policy
- Students cannot have any cell phones or other electronics out in the classroom when an exam or quiz is being given. Students must keep their cell phone/electronics turned off or in silent mode, and inside their backpack.
- If a student has a cell phone or other electronics out when an exam/quiz is being given, they will receive a grade of zero on the exam/quiz.
- Even after the student has handed in their exam/quiz, they still cannot have a cell phone/electronics out in the classroom. Students must wait until after they leave the classroom to take out cell phones/electronics.
- There will be no discussion of what the student was doing with the cell phone/electronics, the student will simply receive a grade of zero.
Course Reserves
The following books are available on Course Reserves at King Library, and may be helpful for reinforcing material:

Note
The procedures and schedule in this course syllabus are subject to change at the instructor’s discretion.

University Policies
The University Policy S16-9, Course Syllabi (http://www.sjsu.edu/senate/docs/S16-9.pdf) requires the following language to be included in the syllabus: “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.”

University policy S17-1 (http://www.sjsu.edu/senate/docs/S17-1.pdf) which states that “Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment.”

University policy F69-24 at http://www.sjsu.edu/senate/docs/F69-24.pdf states, “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”

Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See University Policy F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

General Expectations, Rights and Responsibilities of the Student
As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU’s policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. To learn important campus information, view University Policy S90–5 at http://www.sjsu.edu/senate/docs/S90-5.pdf and SJSU current semester’s Policies and Procedures, at http://info.sjsu.edu/static/catalog/policies.html. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not address the issue, it is recommended that the student contact the Department Chair as the next step.

Dropping and Adding
Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/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/.

Consent for Recording of Class and Public Sharing of Instructor Material

University Policy S12-7, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor’s permission to record the course and the following items to be included in the syllabus:

- “Common courtesy and professional behavior dictate 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. Such 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.”
  - It is suggested that the greensheet include the instructor’s process for granting permission, whether in writing or orally and whether for the whole semester or 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.”

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf 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 Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

University Policies

Per University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf), 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/” Make sure to review these university policies and resources.
Course Schedule
PSYC 121B – Advanced Research Methods: Cognition/Perception Laboratory, Spring 2019

Note: This schedule is subject to change. Class activity dates are approximate. I will announce any changes of assignment due dates or quiz date in class and by email.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Class Activities</th>
<th>Assignments Due, Etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mon. 1/28</td>
<td>lecture, conduct and analyze Exp. A</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mon. 2/4</td>
<td>lecture, conduct Exp. B</td>
<td>research ethics tutorial</td>
</tr>
<tr>
<td>3</td>
<td>Mon. 2/11</td>
<td>lecture, analyze Exp. B, form groups</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mon. 2/18</td>
<td>lecture, conduct Exp. C, brainstorming in groups</td>
<td>LR 1</td>
</tr>
<tr>
<td>5</td>
<td>Mon. 2/25</td>
<td>analyze Exp. C, brainstorming in groups</td>
<td>Quiz</td>
</tr>
<tr>
<td>6</td>
<td>Mon. 3/4</td>
<td>design experiment</td>
<td>LR 2, idea summary (PS 1)</td>
</tr>
<tr>
<td>7</td>
<td>Mon. 3/11</td>
<td>prepare experiment</td>
<td>proposal worksheet (PS 2)</td>
</tr>
<tr>
<td>8</td>
<td>Mon. 3/18</td>
<td>prepare experiment</td>
<td>IRB protocol (PS 3)</td>
</tr>
<tr>
<td>9</td>
<td>Mon. 3/25</td>
<td>run your studies!</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mon. 4/1</td>
<td>run your studies!</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Mon. 4/8</td>
<td>run your studies!</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Mon. 4/15</td>
<td>run your studies!</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Mon. 4/22</td>
<td>analyze project data</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Mon. 4/29</td>
<td>analyze project data</td>
<td>data analysis (PS 4)</td>
</tr>
<tr>
<td>15</td>
<td>Mon. 5/6</td>
<td>work on oral presentation</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Mon. 5/13</td>
<td>work on oral presentation</td>
<td>final paper (PS 5)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Wed. 5/15</td>
<td>9:45am-12:00pm in DMH 236</td>
<td>oral presentations (PS 6)</td>
</tr>
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