San José State University
Department of Psychology
Psyc 121B, Advanced Research Methods: Cognition/Perception
Sections 10/11, Fall 2021

Course and Contact Information

Instructor: Patrick F. Cravalho, PhD
Email: patrick.cravalho@sjsu.edu
Office Hours: Held via Zoom on Wednesdays between 9:45-11:45am or by appointment.
Course days & times (our course is online & synchronous):
- Thursdays, Seminar (Group) Zoom meetings from 1:00 - 1:50pm,
- Lab (Individual) Zoom meetings from 2:15 - 5:15pm.
Prerequisites: Psyc 100W, Psyc 118 or 120, plus one of: Psyc 135, Psyc 155, Psyc 158

Course 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.

Course Goal
The goal of this course is to provide you with the practical experiences needed to develop a meaningful cognition and/or perception research project.

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

- **CLO1** – Display knowledge of the concepts and theories relevant to research in cognition & perception.
- **CLO2** – Devise & use a research question as a guide to developing the components of a research project.
- **CLO3** – Effectively and efficiently search and review a selected research literature.
- **CLO4** – Develop testable hypotheses.
- **CLO5** – Design experimental methods & a data analysis plan for testing one’s hypotheses.
- **CLO6** – Complete ethics training and an SJSU IRB application.
- **CLO7** – Disseminate one’s research review findings and experiment design via an oral presentation.

Program Learning Outcomes (PLO)
Upon successful completion of the psychology major requirements… *(Psyc 121B meets each PLO!)*

1. **PLO1** – Knowledge Base of Psychology – Students will be able to identify, describe, & communicate the major concepts, theoretical perspectives, empirical findings, & historical trends in psychology.
2. **PLO2 – Research Methods in Psychology** – Students will be able to design, implement, & communicate basic research methods in psychology, including research design, data analysis, & interpretations.

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

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

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

**Materials**

1. Laptop/desktop/tablet, and Internet access. SJSU has a free equipment loan program for students: [https://www.sjsu.edu/learnanywhere/equipment/index.php](https://www.sjsu.edu/learnanywhere/equipment/index.php).

2. Access to Google documents, sheets, & slides and/or access to Microsoft Word, Excel, & PowerPoint and/or Apple Pages, Numbers, & Keynote. **NOTE**: SJSU students can utilize Microsoft Online (which includes Word, Excel, and PowerPoint) for free (see [http://itsdev2.sjsu.edu/services/software/microsoft-students/index.html#instructions](http://itsdev2.sjsu.edu/services/software/microsoft-students/index.html#instructions)).

**Office Hours**

The Zoom office hours are NOT drop-in. You need to email your instructor at patrick.cravalho@sjsu.edu to let them know you want to come to office hours (and to let them know WHY you want to come to office hours). If the office hours time period doesn’t work for you, then you can email the instructor to request and explain why you want to make an appointment to meet over Zoom.

**Protocol for Zoom Meetings**

During our Zoom meetings, you need to do all of the following: 1) choose a quiet place to attend the meeting where you can avoid distractions, 2) refrain from multitask during the meeting, and 3) have your microphone on mute unless you are speaking to the instructor or a classmate during lecture/discussion. The Zoom meetings will NOT be recorded. Be sure to attend each Zoom meeting unless you have a legitimate excuse for missing the meeting. DO NOT create your own recording of any of our Zoom meetings without the instructor’s permission.

**Email Communication**

All email communications to your instructor need to be sent to patrick.cravalho@sjsu.edu and include “Psyc 121B” in the subject line. **Please DO NOT message me through Canvas.** As a rule of thumb, write separate emails for communicating different topics, rather than writing about multiple topics under one email subject line. This helps me to not miss reading/replying to important information that you wish to share with me.

**Checking Canvas regularly**

I will regularly post materials, information, etc. on the following links on our Psyc 121B Canvas webpage: Announcements, Assignments, Grades, Pages, and Files. Therefore, you need to regularly check our Psyc 121B Canvas webpage (all of the links listed above are on the left side of our Psyc 121B Canvas webpage).
Checking your SJSU email regularly

If I need to contact you or send you feedback on an assignment, but I have not received any prior email communication from another one of your email accounts, I will contact you via your sjsu.edu email address. Therefore, you need to regularly check your sjsu.edu email address.

Diversity Statement

We will create a safe and diversity-sensitive learning environment that respects the rights, dignity, and welfare of all students, faculty, and staff. Diversity means the fair representation of all groups, the inclusion of minority perspectives and voices, and appreciation of different cultural and socioeconomic group practices. I aspire to foster and maintain an atmosphere that is free from discrimination, harassment, exploitation, or intimidation.

Course Requirements and Assignments

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 practice. Other course structures will have equivalent workload expectations as described in the syllabus. More details about student workload can be found in University Policy S16-9.

Research Proposal (RP) Assignments

Initial Proposal

You will submit a brief document that will help guide all of the following research proposal assignments. This document will include a topic in cognition/perception that interests you, a research problem and a research question that are related to each other (and both of which are related to your topic), and keywords to aid your initial research literature search. This assignment is worth five points. You will receive feedback from the instructor on your initial proposal.

Literature Review Matrix

You will complete a literature review of 20 articles. We will discuss research problems, research questions, testable hypotheses, and “holes” in research literatures in class as you work on your literature review, as these concepts will shape your literature review and the following research proposal assignments. You will search the prior research literature related to your problem, question(s), and hypothesis/hypotheses. You will then read and summarize the relevant articles via an Excel matrix. An example matrix will be shared and discussed in class. This assignment is worth 60 points. You will receive feedback from the instructor on your literature review matrix. You can also contact SJSU’s Library Liaison for the Psychology Department, Christa Bailey (christa.bailey@sjsu.edu). Here is a link Christa’s Libguide: http://libguides.sjsu.edu/psychology

Proposal Update

You will submit a brief document to update your research proposal after completing the literature review. This document will include updates to your statement of the research problem and research question(s), then information on the “holes” in the literature, hypothesis/hypotheses, population of interest, independent and dependent variables, and a preview of your research design. This assignment is worth 12 points. You will receive feedback from the instructor on your proposal update.
IRB Application

You will complete the San José State University Institutional Review Board (IRB) application and protocol narrative to describe your proposal research project: http://www.sjsu.edu/research/irb/irb-forms/index.html. Completing the application and narrative is worth 10 points. You will receive feedback from the instructor on your IRB application.

CITI Ethics Training

You will complete the Collaborative Institutional Training Initiative (CITI) online research ethics training course for social & behavioral science researchers: http://www.sjsu.edu/research/irb/irb-researcher-training/index.html. This is the same training course required to be completed by all researchers at San José State University and most other research institutions. Completing the training is worth five points.

Research Proposal Presentation

You will give an in-class presentation of the experimental cognition/perception research study you will be designing over the span of this course. You will receive a separate set of instructions for this presentation and we will discuss those assignment parameters in class via an example research project presentation. You will first turn in a draft of your presentation, then you will receive feedback on that draft and will be expected to incorporate edits based on that feedback into your final presentation. The presentation draft will be worth five points and the final presentation will be worth 45 points.

Late RP Assignment Submission Policy

For each 24-hour period that you submit an assignment after the due date/time, I will subtract 25% off of your grade. No assignment will be accepted 48 hours after the due date/time. If you fail to turn in your Initial Proposal and/or Research Proposal Presentation Rough Draft within the parameters outlined in the “RP Assignments” and the “Late RP Assignment Submission Policy” sections of this syllabus, you will receive a zero on that assignment, but still must complete it in order to be eligible to turn in your Proposal Update and/or Research Proposal Presentation Final Draft.

Online Participation (OP) Assignments

You will complete eleven online participation assignments via Canvas submission, worth a total of 58 points (5-8 points each). You will only receive credit for an OP assignment if you submit your work on the assignment before the scheduled due date.

Online Participation Assignment Make-up Policy

If you have a legitimate reason for missing an OP assignment, you may be permitted to make up the online assignment. However, you will need to contact me as early as you can, let me know your legitimate reason for missing the assignment, and provide some proof of the legitimate reason you missed the assignment. If you miss the assignment due to an unanticipated reason, contact me as soon as you can to explain your reason and to provide some proof of why. If you don’t contact me at least 24 hours after the assignment took place, you will not be allowed a make-up, regardless of whether you have a legitimate excuse.
Extra Credit Opportunities

A total of ten extra credit points may be added to your final point total if you take advantage of the following opportunities. Ten points is a substantial amount (i.e., 5% of your final grade), but the points must be earned and are being made available to encourage specific learning behaviors.

The first opportunity will be to earn seven points for submitting the Research Proposal (RP) assignments early. Specifically, you must submit each RP assignment a day early. For example, your Initial Proposal is due by 11:59pm on Sunday (8/29), so you must turn it in before 11:59pm on Saturday (8/28) for it to count as a day early. You can only earn the full seven points by submitting ALL 7 RP assignments early. You earn 0.75 points for submitting each of the initial proposal, proposal update, presentation draft and final presentation early. You earn a point for submitting each of the IRB application and the CITI certificate early. You earn two points for submitting the literature review matrix (LRM) early. These points are tiered if you do not complete all 7 RP assignments early (e.g., if you submit 4/4 RP assignments worth 0.75 extra credit points early, 1/2 RP assignment worth an extra credit point early, and don’t get the LRM in early, you receive only 4 extra credit points). This opportunity is meant to encourage you to complete RP assignments early rather than procrastinate in completing your RP assignments.

The second opportunity is to earn three points for submitting each of the Online Participation (OP) assignments by the posted deadlines (see schedule below for OP assignment deadlines). (NOTE: there are no early deadlines for the OP assignments.) You can only earn the full three points by submitting ALL 11 OP assignments on time (i.e., you earn 0.25 points for each OP assignment submitted on time, then an extra 0.25 points if you submit all 11 OP assignments on time). These points are tiered if you do not complete all 11 OP assignments on time (i.e., if you submit 10/11 OP assignments on time, you receive 2.5 extra credit points, if you submit 9/11, you receive 2.25 points, etc.). This opportunity is meant to encourage you to fully participate in our online course to learn as much of the material as you can.

Grading Policy

Your grade will be based on the total amount of points (200 possible points) you receive from RP assignments (142 possible points) and OP assignments (58 possible points). Below is a breakdown of the amount of points needed to earn the specified letter grades. (NOTE: Individual quiz and assignment totals may change over the course of the semester causing a change in the total amount of points.) 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 (http://www.sjsu.edu/senate/docs/F13-1.pdf) for more details.

200+ = A+ (100%)
185-199 = A (~93-99%)
179-184 = A- (~90-92%)
175-178 = B+ (~88-89%)
165-174 = B (~83-87%)
159-164 = B- (~80-82%)
155-158 = C+ (~78-79%)
145-154 = C (~73-77%)
139-144 = C- (~70-72%)
135-138 = D+ (~68–69%)
125-134 = D (~63–67%)
120-124 = D- (~60–62%)
Less than 117 = F
Less than 135 = D (59% or less)

NOTE: I will NOT provide any student with an informal grade check at any point of the semester. The only grade checks to be provided are those accompanying official SJSU forms (e.g., athletics, Greek life, probation).
Study & Workspace Resources

SJSU has designated 21 available classrooms, in buildings around the campus, for students to use for studying, attending online classes, collaborating with other students, etc. No reservations are required. The students can just go to the room, set themselves up, and start working. See the Study Resources page (find this page on the Campus Resources tab) on the Learn Anywhere site to find information about the study and work spaces on campus. The study and workspace rooms are available August 19 through December 6, 2021.

Student Athletes

If you are a student athlete, please inform me at the beginning of the semester of any team obligations. If there are any conflicts between your obligations and class participation/assignment, we may need to figure out alternative arrangements for you to participate or complete an assignment.

Links to University Policies

General Expectations, Rights and Responsibilities of the Student

Students are encouraged to familiarize themselves with SJSU’s policies and practices via University Policy S90–5 (http://www.sjsu.edu/senate/docs/S90-5.pdf). More detailed information on a variety of related topics is also available in the SJSU catalog (http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html).

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness (http://info.sjsu.edu/static/catalog/policies.html). Add/drop deadlines can be found on the current academic year calendars document (http://www.sjsu.edu/provost/services/academic_calendars/). The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. 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 any part of the course. Therefore, neither recording of class lectures or discussions nor distribution of course materials are allowed. Failure to follow this policy will be considered a violation of course academic integrity policy and will result in immediate expulsion from the class, a grade of F in the course, and reporting the student to the University and proper authorities for further sanctions.

Academic Integrity

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 (http://www.sjsu.edu/studentconduct/). Depending on the severity of the conduct, you may receive a zero on the assignment or a grade of F in the course. Grade Forgiveness does not apply to courses for which the original grade was the result of a finding of academic dishonesty.

Campus Policy in Compliance with the American Disabilities Act

Presidential Directive 97-03 (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.
**Accommodation to Students' Religious Holidays**

According to University Policy S14-7 (http://www.sjsu.edu/senate/docs/S14-7.pdf), SJSU shall provide accommodation on any graded class work or activities for students wishing to observe religious holidays when such observances require students to be absent from class.

**Student Technology Resources & Resources for Online Learning**

Computer labs and other resources for student use are available: see links: http://www.sjsu.edu/at/asc/) and https://library.sjsu.edu/student-computing-services/student-computing-services. SJSU has consolidated its online learning resources into a single website: https://www.sjsu.edu/learnanywhere/

**SJSU Peer Connections & Writing Center**

Peer Connections is a campus-wide resource for mentoring and tutoring, visit their website at http://peerconnections.sjsu.edu for more information. To make an appointment with the SJSU Writing Center or to refer to the online resources offered through the Writing Center, visit their website: http://www.sjsu.edu/writingcenter.

**SJSU Counseling and Psychological Services (CAPS)**

All students to come into Counseling and Psychological Services, located at the Student Wellness Center, room 300B, for any support needed, visit the CAPS website at http://www.sjsu.edu/counseling.

**Course Schedule**

We will follow the schedule below to the greatest extent possible. However, the schedule is subject to change. You will be given fair notice of any changes via in class announcements, Canvas postings, & emails.

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<th>Date</th>
<th>Seminar Topics &amp; Lab Tasks</th>
<th>Assignments &amp; Due Dates</th>
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| Thu 8-19  | **Seminar**: Course Intro  
Lab: 1) Read the Psyc 121B syllabus & 2) Work on Student Skills OP Assignment       | Student Skills OP Assignment (5 points) due by 11:59pm on Sun (8/22)        |
| Thu 8-26  | **Seminar**: Research Problems & Questions  
Lab: Work on Initial Proposal                                                    | Initial Proposal (5 points) due by 11:59pm on Sun (8/29); early deadline is 11:59pm on Sat (8/28) |
| Thu 9-2   | **Seminar**: Literature Review Intro  
Lab: 1) Search for articles for your Literature Review Matrix (LRM) & 2) Start working on LRM | I suggest you read at least TWO articles for LRM by Sun (9/5).            |
| Thu 9-9   | **Seminar**: Revising Research Questions  
Lab: 1) Work on Research Question OP Assignment & 2) Work on LRM                   | I suggest you read at least SEVEN articles for LRM by Sun (9/12).  
Research Questions OP Assignment (5 points) due by 11:59pm on Sun (9/12) |
| Thu 9-16  | **Seminar**: Generating Testable Hypotheses  
Lab: 1) Work on Testable Hypotheses OP Assignment & 2) Work on LRM                 | I suggest you read at least TWELVE articles for LRM by Sun (9/19).  
Testable Hypotheses OP Assignment (5 points) due by 11:59pm on Sun (9/19) |
| Thu 9-23  | **Seminar**: Identifying “Holes” in the Literature  
Lab: 1) Work on Holes in the Lit OP Assignment & 2) Work on LRM                 | I suggest read at least SEVENTEEN articles for LRM by Sun (9/26).  
Holes in the Lit OP Assignment (5 points) due by 11:59pm on Sun (9/26) |
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| Thu 9-30   | **Seminar**: Literature Reviews Outro  
**Lab**: 1) Work on Literature Review OP Assignment & 2) Finish up LRM | Literature Review Matrix (60 points) *due by 11:59pm on Sun (10/3)*; early deadline is 11:59pm on Sat (10/2)  
Literature Review OP Assignment (8 points) *due by 11:59pm on Sun (10/3)* |
| Thu 10-7   | **Seminar**: Proposal Update & SJSU IRB App Overview  
**Lab**: Work on Proposal Update & 2) Start IRB Application | Proposal Update (12 points) *due by 11:59pm on Sun (10/10)*; early deadline is 11:59pm on Sat (10/9) |
| Thu 10-14  | **Seminar**: Experimental Research Designs  
**Lab**: 1) Work on Experiment Design OP Assignment & 2) Continue working on IRB Application | Experiment Design OP Assignment (5 points) *due by 11:59pm on Sun (10/17)*                  |
| Thu 10-21  | **Seminar**: Participant Recruitment  
**Lab**: 1) Work on Participant Recruitment OP Assignment & 2) Continue working on IRB Application | Participant Recruitment OP Assignment (5 points) *due by 11:59pm on Sun (10/24)*           |
| Thu 10-28  | **Seminar**: Research Data Organization & Analysis  
**Lab**: 1) Work on Data Analysis OP Assignment & 2) Continue working on IRB Application | Data Analysis OP Assignment (5 points) *due by 11:59pm on Sun (10/31)*                    |
| Thu 11-4   | **Seminar**: Research Proposal Presentation (RPP) Overview  
**Lab**: 1) Finish up IRB application & 2) Start RPP Draft | IRB Application (10 points) *due by 11:59pm on Sun (11/7)*; early deadline is 11:59pm on Sat (11/6) |
| Thu 11-11  | **VETERAN'S DAY – NO MEETINGS**                                                           |                                                                                         |
| Thu 11-18  | **Seminar**: Research Ethics for YOUR Projects  
**Lab**: Work on CITI Ethics Training | CITI Ethics Training Certificate (5 points) *due by 11:59pm on Sun (11/21)*; early deadline is 11:59pm on Sat (11/20) |
| Thu 11-25  | **THANKSGIVING BREAK – NO MEETINGS or TASKS**                                            |                                                                                         |
| Thu 12-2   | **Seminar**: Research Proposal Presentations (Round 1)  
**Lab**: 1) Finish up Peer Evaluations & 2) Work on Student Skills Follow-up OP Assignment | RPP Final (R1; 45 points) *due by 11:59pm on Wed (12/1)*; early deadline is 11:59pm on Tue (11/30)  
Peer Evaluations 1 OP Assignment (5 points) *due by 11:59pm on Thu (12/2)  
Student Skills Follow-up OP Assignment (5 points) *due by 11:59pm on Sun (12/5)* |
| Wed 12-8   | Research Proposal Presentations (Round 2)                                                 | RPP Final (R2; 45 points) *due by 11:59pm on Tue (12/7)*; early deadline is 11:59pm on Mon (12/6)  
Peer Evaluations 2 OP Assignment (5 points) *due by 11:59pm on Wed (12/8)* |

Psyc 121B, Sections 10/11, Fall 2021, Patrick F. Cravalho, PhD