

**San José State University**  
**Department of Psychology**  
**Psyc 121B, Advanced Research Methods: Cognition/Perception**  
**Sections 80/81, Spring 2024**

|                               |  |
|-------------------------------|--|
| <b>Instructor:</b>            | Patrick F. Cravalho, PhD   |
| <b>Email:</b>                 | <a href="mailto:patrick.cravalho@sjsu.edu">patrick.cravalho@sjsu.edu</a>   |
| <b>Office Location:</b>       | Dudley Moorhead Hall, Room 319   |
| <b>Student Drop-in Hours:</b> | Online on Wednesday from 12:45pm to 2pm<br>(Zoom link for student drop-in: <a href="https://sjsu.zoom.us/j/88966227163">https://sjsu.zoom.us/j/88966227163</a> )<br>In-person on Thursday from 8:15am to 9:30am<br>OR email me to set up a day/time for an appointment<br><u>NOTE: for drop-in hours or appointments via Zoom, you need to use your SJSU Zoom account to join the meeting.</u> |
| <b>Class Day/Times:</b>       | Held online (via Zoom) on Tuesdays.<br><u>Seminar:</u> 3pm to 3:50pm<br><u>Lab:</u> 4pm to 6:40pm<br>(Zoom link for Seminar & Lab: <a href="https://sjsu.zoom.us/j/89905846008">https://sjsu.zoom.us/j/89905846008</a> )   |
| <b>Prerequisites:</b>         | 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.

### **Course Goal**

The goal of this course is to provide you with the practical experiences needed to develop an actionable research project design.

### **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 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 computer, and Internet access. SJSU has a free equipment loan program for students: <https://www.sjsu.edu/learnanywhere/equipment/index.php>.
2. Access to Google documents, sheets, & slides or to Microsoft Word, Excel, & PowerPoint or to Apple Pages, Numbers, & Keynote. **NOTE:** SJSU students can utilize Microsoft Word, Excel, and PowerPoint online for free (see <https://www.sjsu.edu/it/services/collaboration/software/instructions.php>).

## Student Drop-in Hours

Feel free to email me at [patrick.cravalho@sjsu.edu](mailto:patrick.cravalho@sjsu.edu) to let me know why you want to drop-in (e.g., discuss accommodations), so I can prepare for your visit.

## Email Communication

Please send all email communications to me to [patrick.cravalho@sjsu.edu](mailto:patrick.cravalho@sjsu.edu) and include “Psyc 121B” in the subject line. **Please do not message me through Canvas.** Finally, please write separate emails for communicating different topics, rather than writing about multiple topics in one email. Following these guidelines will ensure I’m able to read and reply to your message as quickly as possible.

## Checking your SJSU email regularly

If I need to contact you, 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, please regularly check your sjsu.edu email address or have it forwarded to the email that you do check regularly.

## Checking Canvas regularly

I will regularly post materials, information, etc. on the following links on our Psyc 121B Canvas webpage: Announcements, Assignments, Files, and Grades. Please regularly check our Psyc 121B Canvas webpage (all of the links listed above are on the left side of our Psyc 121B Canvas webpage).

## **Zoom Protocol**

Zoom lectures will not be recorded, as it is university policy (F69-24; <http://www.sjsu.edu/senate/docs/F69-24.pdf>) that students should attend all meetings of their classes. (**Note: there are no points/grades associated with class attendance or participation.**) DO NOT create your own recording of any of our Zoom meetings. Please choose a quiet place, away from distractions, to sit when you attend our classes. Join the Zoom early, so you are present when class begins. Make sure your microphone is muted and your camera is on. If you want to ask a question or contribute to a class discussion, you have a few options: 1) type your question or comment into the chat box or 2) raise your virtual hand and, when prompted by your instructor, unmute and ask your question or contribute your comment. If you unmute to ask a question or contribute a comment, please mute yourself again once your exchange with the instructor is over.

If you cannot avoid being late, again be sure your microphone is muted upon entry into the meeting. Your attention is expected during class. Do not multitask during class (i.e., check email, visit social networking sites, etc. during class time). Also, phones, music players, etc. are not allowed to be used during class (i.e., all devices should be put away and set to not make any noise). Please stay focused on our class lectures and discussions. In addition, do not carry on conversations, or work on course material (including studying or reading for other classes) during class. Be polite and respectful to your classmates and to your instructor. If you miss a class, you are responsible for contacting your instructor to inquire about the information you missed from that class.

## **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.

## **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.

## **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** (covers CLOs 1/2)

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 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 Spreadsheet** (covers CLOs 1/3)

You will read and summarize 20 empirical research articles via a spreadsheet. We will discuss research problems, research questions, testable hypotheses, and gaps in the literature in class as you work on your literature review, as these concepts will shape your review and the following research proposal assignments. An example literature review spreadsheet will be shared and discussed in class. This assignment is worth 40 points. You will receive feedback from the instructor on your literature review spreadsheet. You can also contact SJSU's Library Liaison for the Psychology Department, Christa Bailey ([christa.bailey@sjsu.edu](mailto:christa.bailey@sjsu.edu)). Here is a link Christa's Libguide: <http://libguides.sjsu.edu/psychology>

### **Proposal Update** (covers CLOs 1/2/4/5)

You will submit a brief document to update your research proposal after completing the literature review spreadsheet. This document will include updates to your statement of the research problem and research question, information on the literature gaps, hypothesis, 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.

### **Collaborative Institutional Training Initiative (CITI) Ethics Training** (covers CLO 6)

You will complete the "Faculty & Staff" version of the CITI online research ethics training course for social & behavioral science investigators: <http://www.sjsu.edu/research/irb/irb-researcher-training/index.html>. This is the same training course required to be completed by all principal investigators (i.e., lead researchers) at San José State University and most other research institutions. Completing the training is worth 10 points.

### **Institutional Review Board (IRB) Application & Assent or Consent Form** (covers CLO 6)

You will complete the San José State University IRB application and create the appropriate assent/consent form for your proposed research project: <http://www.sjsu.edu/research/irb/irb-forms/index.html>. This assignment is worth 20 points. You will receive feedback from the instructor on your application and assent or consent form.

### **Research Proposal Presentation Initial Draft and Final Slides** (covers CLOs 1/2/3/4/5/7)

You will give an in-class presentation of the research proposal you will be designing over the span of this course. We will discuss the assignment parameters in class via an example research project presentations. 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 slides. The presentation initial draft will be worth five points and the final presentation & slides will be worth 40 points.

### **Participation Assignments** (covers CLOs 1/2/3/4/5)

You will complete ten brief assignments via Canvas submission, worth a total of 53 points (2-10 points each). These will include creating a goal for the course, support for the RP assignments, and peer evaluations.

### **Scheduled Lab Time Check-ins** (covers CLOs 1/2/3/4/5/6/7)

You may check in with your instructor as many times as you'd like throughout the semester. However, you must drop in during lab time and check in with your instructor on the following three dates: 1) Tuesday (2/20), 2) Tuesday (3/5), and 3) Tuesday (4/23). You earn 5 points per each check-in (15 total points) on these dates.

## Late Submission Policy

It is very important to stay up-to-date on the RP, Participation, and Check-in Summary assignment due dates by following the schedule below. For each day an assignment is submitted past the due date, 10% will be deducted from your grade. If you fail to turn in your Initial Proposal and/or Research Proposal Presentation Initial Draft within the parameters outlined in the “RP Assignments” and the “Late 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.

## Assignment Make-up Policy

If you have a legitimate reason for missing an assignment due date or scheduled check-in, you will be permitted to make up that assignment or check-in without the late submission penalty. However, you will need to contact me as early as you can to let me know your reason for missing the assignment or check-in, especially if you know you’ll need an extension ahead of the due date. Then we can figure out your timeline for making up the assignment or check-in. If you miss the assignment or check-in due to an unanticipated reason, please contact me within the 24 hours after the assignment or check-in was due.

## Extra Credit Opportunities (covers CLOs 1/2/3/4/5/6/7)

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 every RP assignment **two days** early. For example, your **Initial Proposal** is due by 11:59pm on Friday (9/1), so you must turn it in before 11:59pm on Wednesday (8/30) for it to count as two days early. You can only earn the full seven points by submitting **ALL 7 RP assignments** early. You would earn 0.75 of a point for submitting each of the initial proposal, proposal update, presentation draft and final presentation slides early. You would earn a point for submitting each of the IRB application/consent form and the CITI certificate early. You would earn two points for submitting the literature review spreadsheet (LRS) 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 LRS 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 checking in with your instructor during lab time on **three additional dates** besides the Scheduled Lab Time Check-in dates (2/20, 3/5 and 4/23). Specifically, starting in February, there are ten additional dates we meet for lab time (see course schedule below), and you would have to drop into the Zoom on three of those dates to consult with your instructor about RP and/or Participation assignments. For example, if you were to drop into the Zoom during lab time on Tuesday (4/16) and discuss the Experiment Design assignment with me, you would earn a point. These points are tiered if you do not drop in on three additional dates besides the Scheduled Lab Time Check-in dates (i.e., if you drop in on two additional dates, you receive 2 extra credit points, if you drop in on one additional date, you receive 1 point). **This opportunity is meant to encourage you to regularly engage with a research mentor.**

## Grading Policy

Your grade will be based on the total amount of points (200 possible points) you receive from RP Assignments (132 possible points) Participation Assignments (53 possible points), and Check-in Summaries (15 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%) | Less than 117 = F |
| 135-138 = D+ (~68-69%) | 125-134 = D (~63-67%) | 120-124 = D- (~60-62%) | (~59% or less)    |

## Study & Workspace Resources

SJSU has designated 21 available classrooms 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.

## 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/](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.**

## **Links to University Policies (cont.)**

### **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](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 utilize the 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 Canvas postings and in class announcements.

| Date     | Seminar Topics & Lab Tasks   | Assignments & Due Dates  |
|----------|--|--|
| Tue 1-30 | <b>Seminar:</b> Course Intro<br><b>Lab:</b> 1) Read the Psyc 121B syllabus & 2) Complete Course Goal Assignment  | <b>Psyc 121B Course Goal Assignment (3 points) due by 11:59pm on Fri (2/2)</b>   |
| Tue 2-6  | <b>Seminar:</b> Research Problems & Questions<br><b>Lab:</b> Work on Initial Proposal  | <b>Initial Proposal (5 points) due by 11:59pm on Fri (2/9); early deadline is 11:59pm on Wed (2/7)</b>   |
| Tue 2-13 | <b>Seminar:</b> Literature Review Intro<br><b>Lab:</b> 1) <u>Meet with Christa Bailey (Library Liaison) from 4-5pm</u> & 2) Search for articles for your Literature Review Spreadsheet (LRS) | I suggest you have read at least <b>2</b> articles for LRS by Sun (2/16).  |
| Tue 2-20 | <b>Seminar:</b> Revising Research Questions<br><b>Lab:</b> 1) Check in with instructor, 2) Work on Research Questions Assignment & 3) Work on LRS  | <b>Scheduled Lab Time Check-in (5 points) due between 4 &amp; 7pm on Tue (2/20)</b><br><b>Research Questions Assignment (5 points) due by 11:59pm on Fri (2/23)</b><br>I suggest you have read at least <b>5</b> articles for LRS by Sun (2/25). |
| Tue 2-27 | <b>Seminar:</b> Generating Testable Hypotheses<br><b>Lab:</b> 1) Work on Testable Hypotheses Assignment & 2) Work on LRS   | <b>Testable Hypotheses Assignment (5 points) due by 11:59pm on Fri (3/1)</b><br>I suggest you have read at least <b>10</b> articles for LRS by Sun (3/3).  |
| Tue 3-5  | <b>Seminar:</b> Identifying Literature Gaps<br><b>Lab:</b> 1) Check in with instructor, 2) Work on Literature Gaps Assignment & 3) Work on LRS   | <b>Scheduled Lab Time Check-in (5 points) due between 4 &amp; 7pm on Tue (3/5)</b><br><b>Literature Gaps Assignment (5 points) due by 11:59pm on Fri (3/8)</b><br>I suggest you have read at least <b>15</b> articles for LRS by Sun (3/10).     |
| Tue 3-12 | <b>Seminar:</b> Participant Recruitment<br><b>Lab:</b> 1) Work on Participant Recruitment Assignment & 2) Work on LRS  | <b>Participant Recruitment Assignment (5 points) due by 11:59pm on Fri (3/15)</b><br>I suggest you have read at least <b>20</b> articles for LRS by Sun (3/17).  |
| Tue 3-19 | <b>Seminar:</b> Literature Review Outro<br><b>Lab:</b> 1) Work on Literature Review Assignment & 2) Finish up LRS  | <b>Literature Review Spreadsheet (40 points) due by 11:59pm on Fri (3/22); early deadline is 11:59pm on Wed (3/20)</b><br><b>Literature Review Assignment (8 points) due by 11:59pm on Fri (3/22)</b>  |
| Tue 3-26 | <b>Seminar:</b> Proposal Updates & Research Ethics<br><b>Lab:</b> 1) Work on Proposal Update, 2) <i>Please complete Midterm Evaluation</i> & 3) Work on CITI Ethics Training                 | <b>Proposal Update (12 points) due by 11:59pm on Fri (3/29); early deadline is 11:59pm on Wed (3/27)</b>   |
| Tue 4-2  | <b>ENJOY SPRING BREAK!</b><br><b>NO Seminar, Lab, Assignments, or Drop-in Hours!</b>   |  |



| Date                         | Seminar Topics & Lab Tasks  | Assignments & Due Dates   |
|------------------------------|---|---|
| Tue 4-9                      | <b>Seminar:</b> IRB Overview & SJSU IRB Application/Consent OR Assent Form<br><b>Lab:</b> 1) Start on IRB Application/Assent OR Consent & 2) Finish up CITI Ethics Training       | <b>CITI Ethics Training Certificate (10 points) due by 11:59pm on Fri (4/12); early deadline is 11:59pm on Wed (4/10)</b>   |
| Tue 4-16                     | <b>Seminar:</b> Experimental Research Designs<br><b>Lab:</b> 1) Work on Exp. Design Assignment & 2) Continue working on IRB App/Assent OR Consent                                 | <b>Experiment Design Assignment (5 points) due by 11:59pm on Fri (4/19)</b>   |
| Tue 4-23                     | <b>Seminar:</b> Research Data Organization<br><b>Lab:</b> 1) Check in with instructor, 2) Work on Data Organization Assignment & 3) Continue working on IRB App/Assent OR Consent | <b>Scheduled Lab Time Check-in (5 points) due between 4 &amp; 7pm on Tue (4/23)</b><br><b>Data Organization Assignment (5 points) due by 11:59pm on Fri (4/26)</b>  |
| Tue 4-30                     | <b>Seminar:</b> Research Proposal Presentation (RPP) Overview<br><b>Lab:</b> 1) Work on RPP Initial Draft & 2) Continue working on IRB App/Assent OR Consent                      | <b>RPP Initial Draft (5 points) due by 11:59pm on Fri (5/3); early deadline is 11:59pm on Wed (5/1)</b>   |
| Tue 5-7                      | <b>Seminar:</b> Course Outro<br><b>Lab:</b> 1) Work on Course Goal Follow up Assignment & 2) Finish up IRB App/Assent OR Consent  | <b>Course Goal Follow up Assignment (2 points) due by 11:59pm on Fri (5/10)</b><br><b>IRB Application/Assent OR Consent Form (20 points) due by 11:59pm on Fri (5/10); early deadline is 11:59pm on Wed (5/8)</b> |
| <b>Tue 5-21<br/>2:45-5pm</b> | <b>Final:</b> 1) Research Proposal Presentations & 2) Complete Peer Evaluations   | <b>RPP Final Slides (40 points) due by 11:59pm on Mon (5/20); early deadline is 11:59pm on Sat (5/18)</b><br><b>Peer Evaluations Assignment (10 points) due by 11:59pm on Tue (5/21)</b>                          |