San José State University
Department of Psychology

Psychology 120, Advanced Research Methods and Design,
Sections 40, 41, and 42, Spring 2020

Course and Contact Information

Instructor  
Jill Citron, PhD

Office Location  
Dudley Moorhead Hall 230

Email  
jill.citron@sjsu.edu

Office Hours  
Wednesday and Thursday 12:45 pm to 1:45 pm, and by appointment

Class Days/Time:  
Lecture: Section 40-Monday and Wednesday, 9 am to 10:15am
Lab: Section 41-Monday, 10:30 am to 12:30 pm
OR Lab: Section 42-Wednesday, 10:30 am to 12:30 pm

Classrooms  
Lecture: Dudley Moorhead Hall – Room 150
Lab: Dudley Moorhead Hall – Room 339

Prerequisites  
PSYC 1, STAT 95, PSYC 100W

GE/SJSU Studies Category  
Area Z
**Course Description**

Descriptive, correlational, quasi-experimental, and experimental approaches: design, methodology, and analysis. Experience designing, conducting, analyzing, and presenting (verbal and written) research findings. Topics will include: hypothesis testing, validity, reliability, scales of measurement, questionnaire development, power, statistical significance, and effect size.

Prerequisite: lower division GE complete; PSYC 1; STAT 95; PSYC 100W with 'C' or better (or department approval); Upper Division; Psychology or Behavioral Science Major

Lecture/Lab: Lecture 3 hours/laboratory activity 2 hours.

**Course Learning Outcomes**

*Course Learning Outcomes* (CLOs) are specific, measurable goals and objectives that students have demonstrated upon successful completion of the course.

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

- **CLO 1** Understand how psychology is a science in which people seek to gain knowledge about behavior and mental processes by running experiments and other types of studies. Assessment for this CLO will be in class activities, research development process, midterm and final exams.

- **CLO 2** Understand how the scientific method is used in psychological research. Assessment for this CLO will be assessed by exams and participation in the research process.

- **CLO 3** Understand the differences between the different types of studies and different types of research designs used in psychological research. Assessment for this CLO will be participation assignments, midterm and final exams.

- **CLO 4** Understand why different research methods are needed for different research situations. Assessment of this CLO will be conducted with preparation assignments, midterm, and final exams.

- **CLO 5** Understand and know the advantages and disadvantages of specific research methods. Assessment of this CLO will be conducted with preparation assignments.

- **CLO 6** Understand and know the vocabulary associated with psychological research methods. Assessment of this CLO will be conducted with preparation assignments.

- **CLO 7** Understand how to treat research participants ethically and why the ethical treatment of participants is important and necessary. Assessment of this
CLO will be conducted with preparation assignments and the midterm exam.

CLO 8 Understand the factors that can affect the ability of a research study to provide a sound answer to a researcher’s question and how to reduce or eliminate these factors. This CLO will be assessed by preparation assignments, the midterm and final exams.

CLO 9 Understand why statistics are important and needed in psychological research. Assessment of this CLO will be conducted with preparation assignments.

CLO 10 Understand the meaning of statistical significance. Assessment of this CLO will be conducted with participation assignments and the final exam.

CLO 11 Conduct statistical analyses and interpret the results. This CLO will be assessed by the research report.

CLO 12 Understand the limitations of the results of studies and draw appropriate conclusions from the results of research studies. This CLO will be assessed by the research report.

CLO 13 Carry out a research study from beginning to end (including writing a research report). This CLO will be assessed by the research report.

Program Learning Outcome

Program Learning Outcomes (PLOs) are specific, measurable goals and objectives that students have demonstrated upon successful completion of the program.

Upon successful completion of the psychology major requirements:

PLO 1 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.

PLO 2 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.

PLO 3 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.

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

PLO 5 Values in Psychology – Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.
Required Texts/Readings

Textbook-Required
ISBN number: 978-0-495-60231-6

APA Publication Manual-Strongly Recommended

Other Readings
Students will also read peer-reviewed journal articles that they find online or in the library.

Other Technology Requirements / Equipment / Material
Students will need to have access to Psych Info through the SJSU Library.
Access to SPSS Software
Scantron and # 2 pencils for exams

Course Requirements and Assignments

SJSU classes are designed for students to be successful. It is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Classes may include lectures, in-class activities, question-and-answer periods, demonstrations, and films. Attendance is required and critical for success in this course. If you miss a class, you are responsible for the information from that class. It is vital that you complete all scheduled readings and assignments before each class. Bring your text to all classes.

The primary methods of assessment for this course will be a research proposal, final research report, a class presentation of the project, midterm, and final exam. The point value for each of the assignments can be found in the grading policy. Information about dates are included in the Course Calendar. Please note that the course calendar is tentative course calendar and “subject to change with fair notice” including assignment due dates, exam dates, date of final exam; you might want to include as well.

The research project requires students to conduct independent research, including data collection.
It should be noted that the Academic Vice President in a memorandum dated October 25, 1977 cites a university policy that states that there shall be an appropriate final examination or evaluation at the officially scheduled time in every course, unless specifically exempted by the college dean who has curricular responsibility for the course.

**Lab:** Lab attendance is mandatory and critical to successful completion of this course. Access to DMH 339 (computer lab) is available during scheduled class time. You will have access to computers during scheduled lab time, but you will need additional computer time you must make your own arrangements. It is strongly recommended that you obtain a copy of SPSS through SJSU. The software is free and having access to the software outside of lab time will help you meet research project deadlines.

Students will participate in a research project conducted over the duration of the course. The project will be done in collaboration with research group members. Research groups will be created and meet during lab time. Research groups will be connected in CANVAS. Please note that group members must be registered for the same lab session.

Each laboratory assignment will prepare you to successfully complete your research study and report write-up. While some of the lab work is not formally graded, failure to participate in each step will likely interfere with your ability to complete the research project to the best of your ability. Team participation in lab work is required. If you do not contribute to the project in a substantive way, you are taking advantage of others (hanger-on, cadger, freeloader, moocher, lounge lizard, etc.) Participation will be assessed by group evaluations at the end of the semester. Research group evaluations may influence *your course grade up to a full letter grade.*

As per University policy F69-24 found at [http://www.sjsu.edu/senate/docs/F69-24.pdf](http://www.sjsu.edu/senate/docs/F69-24.pdf) states that “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.”

**Exams:** One midterm exam and one non-cumulative final exam will be given during the semester. Exams will consist of multiple-choice questions and may include short answer questions. A basic review guide will be posted the week before exams. Students are encouraged a 3”x5” index card with study notes. Bring a Scantron (882-E) and #2 pencil to exams. Exams will assess your ability to apply the concepts and content you have learned during the semester. *Cheating on exams will not be tolerated.* Please refer to the section on Academic Dishonesty for information on the consequences of cheating.

- The midterm exam will be taken during our regular class time, Wednesday, March 11th.
- The final exam will be Monday, May 18th, 7:30 am - 9:30 am.

**Preparation Assignments:** There will be 10 assignments posted on Canvas, each assignment will include 1 or 2 short answer questions based on important course content.

The assignments will be available via Canvas on Sunday and due Saturday of the assigned week. Do not submit assignments to Canvas later than 9:00 pm. You will not receive any consideration for submission issues if your documented submission attempt is later than 9 pm on the due date.

Note: Each preparation assignment is an independent assignment. Although students may discuss their responses, assignments are to be completed individually in the student’s own language. Students must cite sources according to APA style.
**In-class Activities:** In-class activities will be based on an active learning assignment to be completed during class. In-class activities will vary. Some activities will include complementary exercises, such as (but not necessarily limited to), participating in experiments, recording data, performing calculations, creating graphs, interpreting graphs, running simulations, or answering discussion questions. In-class activities will often include follow-up questions that students can answer in small groups. Even when students are completing an activity as a group, each student is responsible for submitting their own work. Each assignment is worth 2 points. If you miss the in-class activity it cannot be made up.

**Research Project:** Your research team will develop an original research hypothesis guided by parameters set by the instructor. Project work will take place during lab, lecture, and outside of class time.

Each research group will submit a full research proposal, collect and analyze their group data, write a professional level APA-style research report and give a quality presentation of your research findings. The paper will be a minimum of 12 pages in length (double-spaced, typed, 12-point font) and include a minimum of 20+ peer-reviewed, scholarly references. Each group will need to decide how to divide the writing of the proposal, recruitment, and data collection (along with deciding how to divide all of the other responsibilities involved in completing the project). The research proposal is a shared project. Your final report will include shared group work and individual work. The title page, abstract, and discussion of your final paper submission must be your own work.

Plagiarism of any kind will not be tolerated. Please refer to the section on Academic Integrity for information about the consequences of plagiarism. You must cite all of the sources that your information comes from and also use quotations when you are directly quoting information from a source.

Each student is responsible for submitting their own final report by Canvas upload. Late reports will not be accepted.

**Research Group Presentation:** Your research team will present a short slideshow outlining your project and findings. Clear instructions will be provided on Canvas. This project is a group effort and the power-point presentation will be uploaded to Canvas by the last day of class, Monday, May 11th. Each student is responsible for submitting their own work.

**Final Group Evaluation:** Students will evaluate each group member for participation, cooperation, collaboration, work quality, and self-reflection. Students receiving low marks from their peers on this evaluation will have their final project grade reduced by a full letter grade. The group evaluation will be completed on the day of the final exam. Peer evaluations are considered part of the final project grade. Not completing peer evaluations will result in lost points.

Each student is required to complete two tutorials by the end of the first week of classes; Info Power-Research Skills and Plagiarism. There are no points awarded for completion of these assignments, but you must receive a 90% or better to maintain registration in this course.
**Grading Information**

Your final grade will be based on the number of points that you earn during the semester. The following table provides a breakdown of the 500 points that you can earn during the semester.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>How Many?</th>
<th>Points Per Assignment</th>
<th>Total Points</th>
<th>% of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Preparation Assignment</td>
<td>10</td>
<td>5</td>
<td>50</td>
<td>10%</td>
</tr>
<tr>
<td>In-Class Activities</td>
<td>10</td>
<td>1</td>
<td>10</td>
<td>2%</td>
</tr>
<tr>
<td>Final Research Paper</td>
<td>1</td>
<td>200</td>
<td>200</td>
<td>40%</td>
</tr>
<tr>
<td>Presentation</td>
<td>1</td>
<td>50</td>
<td>50</td>
<td>10%</td>
</tr>
<tr>
<td>Lab Activities</td>
<td>4</td>
<td>10</td>
<td>40</td>
<td>8%</td>
</tr>
<tr>
<td>Lab Research Proposal</td>
<td>1</td>
<td>50</td>
<td>50</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td><strong>500</strong></td>
<td><strong>100%</strong></td>
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**Grading Scale:**

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
</tr>
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<tbody>
<tr>
<td>100 – 93</td>
<td>A</td>
</tr>
<tr>
<td>92-90</td>
<td>A-</td>
</tr>
<tr>
<td>89 – 88</td>
<td>B+</td>
</tr>
<tr>
<td>87-83</td>
<td>B</td>
</tr>
<tr>
<td>79 – 78</td>
<td>C+</td>
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<td>77-73</td>
<td>C</td>
</tr>
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<td>72-70</td>
<td>C-</td>
</tr>
<tr>
<td>69 – 65</td>
<td>D</td>
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<tr>
<td>64 or below</td>
<td>F</td>
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Classroom Protocol

**Lecture Sessions:** Lecture sessions will include lectures, in-class activities, and class discussions. Lectures will often include basic PowerPoint presentations. PowerPoint slideshows presented in class will be available on Canvas. Additional information on topics will always be provided during lecture. Therefore, it is important to ask another student for notes if you miss a lecture session.

**Laboratory Sessions:** Laboratory sessions will include a sequence of activities in which you will work toward the completion of your research project. Research groups will be required to meet with the instructor during certain weeks to discuss the project and to receive guidance and feedback.

**Late Work:** All assignments must be submitted by the scheduled due date. No extensions or make-up exams will be given except in cases of documented academic reasons, emergencies, or serious illness, without written documentation for the reason you could not take the exam. Do NOT ask me for extensions.

**Attendance:** Students are expected to attend all meetings for the courses in which they are enrolled as they are responsible for material discussed therein, and active participation is frequently essential to ensure maximum benefit to all class members.

*According to University Policy F15-12,* “Students are expected to attend all meetings for the courses in which they are enrolled as they are responsible for material discussed therein and active participation is frequently essential to ensure maximum benefit to all class members. In some cases, attendance is fundamental to course objectives; for example, students may be required to interact with others in the class. Attendance is the responsibility of the student. Participation may be used as a criterion for grading when the parameters and their evaluation are clearly defined in the course syllabus and the percentage of the overall grade is stated.”

**Academic integrity**

Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage will not be tolerated. If evidence of academic misconduct is found, you will receive a zero on the assignment(s) in question, and I will file a report with the Office of Student Conduct & Ethical Development. See the [office’s website](http://www.sjsu.edu/studentconduct/policies/) for more information at http://www.sjsu.edu/studentconduct/policies/.

**Viewing grades**

Grades will be posted on Canvas in a timely manner. 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](http://www.sjsu.edu/senate/docs/F13-1.pdf) at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

Students will maintain a level of professionalism and courteous behavior at all times. You are required to silence your cell phones before the beginning of class. Laptops are to be used for note-taking and in-class activities only. You are expected to be respectful of your fellow classmates such that you do not
distract them by browsing the internet or chatting online during class. Students not abiding by these policies will be asked to leave the room.

**Diversity Statement**

Diversity means the fair representation of all groups of individuals, the inclusion of minority perspectives and voices, and appreciation of different cultural and socioeconomic group practices. It is my goal to create a safe and diversity-sensitive learning environment that respects the rights, dignity, and welfare of all students, faculty, and staff.

**University Policies**

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at [http://www.sjsu.edu/gup/syllabusinfo/](http://www.sjsu.edu/gup/syllabusinfo/).

**Librarian: Psychology**

The SJSU library has a librarian who specializes in psychology (and other social sciences), and this librarian can serve as a very valuable resource for helping you to develop research ideas and locating appropriate research materials. The library also has an abundance of resources for doing psychology research: Psychology Librarian:

Christa Bailey  
408-808-2422  
christa.bailey@sjsu.edu  
http://libguides.sjsu.edu/psychology

**Student Resources**

Computer labs and other technological resources for students can be found in various places on campus such as:

- Student Computing Services (MLK Jr. Library)  
- The Spartan Floor (MLK Jr. Library)  
- Associated Students Print and Technology Center

For assistance with SPSS and access to software, [http://www.sjsu.edu/ecampus/research-tools/spss/index.html](http://www.sjsu.edu/ecampus/research-tools/spss/index.html)

**ACCESS Success Center**

The Academic Counseling Center for Excellence in Social Sciences (ACCESS) Success Center “provides general education advising for undergraduate students majoring or intending to major in any of the departments in The College of Social Sciences.” If you have a question, contact the ACCESS Center at 408.924.5363 or email at [socsci-success@sjsu.edu](mailto:socsci-success@sjsu.edu).
SJSU Peer Connections

Peer Connections website “offers free mentoring, tutoring, and supplemental instruction services for students at SJSU. Peer Educators are students just like you; they understand the triumphs and challenges of being a student at San José State University.” If you have questions about services, contact the Peer Connections at 408-924-2587 or email at peerconnections@sjsu.edu

SJSU Writing Center

The SJSU Writing Center “offers a variety of resources to help students become better writers, and all of our services are free for SJSU students.” If you have questions about services, call the Writing Center at 408.924.2308 or email us at writingcenter@sjsu.edu.

SJSU Counseling and Psychological Services (CAPS)

SJSU Counseling and Psychological Services invites “all students to come into Counseling and Psychological Services, located at the Student Wellness Center, room 300B, for any support. If you have questions about services, contact CAPS at (408) 924-5910 or email at counseling.services@sjsu.edu

Office Hours

Our official office hours are Wednesday and Thursday from 12:45 pm - 1:45 pm and by appointment. You can usually find me in my office (DMH 230) Monday and Tuesday during these times, as well, as before class and office hours. I encourage you to come to office hours. You may bring your course and other inquires as well. I have a series of psychology career/graduate school related books to browse and borrow. If I am not in my office during official meeting times, there will be a note posted on my door as to where you can find me.