San José State University Department of Psychology

PSYC 118: Advanced Research Methods in Psychology Fall 2024

My Section of PSYC 118

Sections 20/21 - Fall 2024 - Lecture/Lab 3 units

Instructor: Mike Dillinger, PhD

Email: <u>mike.dillinger@sjsu.edu</u> - *Preferred*

Office Hours: Mondays and Wednesdays 12:00-12:30 PM, or by appointment.

Also Wednesdays, 9:00-10:00 AM

Office Location: DMH 230

Location/Class Days/Time:

Lecture 118-20 - DMH **234**, Mondays & Wednesdays, 1:30 pm – 2:20 pm Lab 118-21 - DMH **339** - Mondays 3:00 pm – 5:00 pm

CANVAS and MYSJSU Messaging

You are responsible for regularly checking with the messaging system through MySJSU on Spartan App Portal http://one.sjsu.edu (or other communication system as indicated by the instructor) to learn of any updates.

Messages to the class may be sent through Canvas or MYSJSU.

Accessing the Canvas site for these Sections

To access the Canvas site go to http://www.sjsu.edu/at/ec/canvas/ and click on "Log in to Canvas"

Username = Your SJSU 9-digit ID

Password = Your current SJSUOne password

For additional information or help with logging in, to: Canvas Student Tutorial: http://www.sjsu.edu/at/ec/canvas/
Note: It is strongly recommended that you use the Chrome Web Browser when using Canvas. In addition, be sure to update your Canvas setting to receive messages from this course, as announcements are sent out on a regular basis. Clearing your browser's cache may help if you have trouble logging into Canvas.

Communication with the Instructor

Use email, office hours, or class time to ask questions. Ask lots of them! Please allow 1-2 days for a response to emails. If you don't get a reply, then feel free to remind me:) When emailing, remind me of your research question. If you have extensive questions about an assignment or class work, come in to office hours or make an appointment for a different time.

Required Readings & Equipment

Readings. You are not required to *buy* a textbook for this course, but you really do have to *read* the one on Canvas! It's called *Hands-on Research Methods*, stored one task package at a time. All course materials such as the syllabus, assignment handouts, and other relevant materials will be available on Canvas. They explain the details of how you should proceed and what the deliverables will look like.

Equipment. You will need easy access to a computer with word-processing, email, spreadsheet, and internet browsing applications. I suggest that you write in Google Docs so you can collaborate directly on the same shared documents and share folders of relevant articles. Computers are provided in our Lab sections, but you will find it more convenient to use your own laptop or carry a USB drive. Always back up your work!

Classroom Protocol

This is a hands-on, *advanced* course, which means that you must take charge of your work and your schedule. **Your goal for the semester is to collaborate with a partner to plan, run, and report a single experiment.** That's the whole semester. The department requires this course so you can develop an understanding of the principles and procedures involved in scientific research in psychology and elsewhere.

Effective time management is essential. Something important will be due each week, so plan ahead. Past students have emphasized the **importance of not falling behind** on task deliverables and asking LOTS of questions – please remember I am a key resource for your success. Try to work ahead of the schedule whenever possible. They have also reported that it is a very labor-intensive course that requires considerable dedication outside of class time, so I **do not recommend taking this course** if you have other competing activities this semester.

On paper, the course includes both a lecture and a laboratory component. In practice, **I will run this like a real laboratory**, with few lectures and lots of interaction. (But you can ask for a lecture at any time!) That's why I call the manual that I wrote for you *Hands-on Research Methods*. I've already divided the work into coherent tasks in a logical sequence, then assembled all of the material that you need for each task in a "chapter". My job, as I see it, is as a **coach** – to guide and support your work in the most effective ways that I can. I teach the course this way to help you develop both ownership of your work and collaboration skills – which are keys to your success in grad school and the workplace.

A large part of your success will be effective collaboration, so you are expected to maintain a level of professional and courteous behavior at all times. You are required to put your cell phone and other distractions away before the beginning of class. I expect you to be respectful of your fellow classmates and to receive the same respect in return. This includes introducing distractions and unrelated comments during class. You will be evaluated on your ability to collaborate and the result will become part of your grade.

Grading

The grading scheme is designed to promote better time management, better collaboration, and an emphasis on the quality of your deliverables – reflecting the realities of the workplace.

5%	Research Problem and Bibliography approved on time		
5%	Full Literature Review approved on time		
5%	Full Methods section and data collection materials approved on time		
10%	Data collection and analysis completed on time (by Oct 30)		
5%	Full Results section approved on time		
5%	Full Discussion section approved on time		
15%	Final Slides and presentation		
50%	Final, APA-format research paper + Extra materials		
	The Final Exam is required but does not contribute to your grade. It will cover the principles of experimental design and execution.		
	Optional Extra Credit 1: 5 pts for effective collaboration		
	Optional Extra Credit 2: 5 pts for Research Poster summary		

Schedule of Deliverables

Week	Mondays	Wednesdays	What's due by midnight on Wednesday?	Reference Materials on Canvas
1		August 21	First Day of Class	
2	August 26	August 28	Research Problem and Bibliography due	Tasks 1, 2, 3
3	September 2	September 4		Task 3
4	September 9	September 11	Draft Lit Review due	Task 3, 4
5	September 16	September 18	Full Lit Review due	Task 4, 5
6	September 23	September 25	Draft Methods due	Task 5
7	September 30	October 2	Full Methods section and materials due	Task 7: Collect data
8	October 7	October 9		Task 7: Collect data
9	October 14	October 16	Draft Data due	Task 7: Collect data
10	October 21	October 23	Full data due	Task 7: Collect data
11	October 28	October 30	Data Analyses due	
12	November 4	November 6	Draft Results section due	Task 8, 9
13	November 11: NO CLASS	November 13	Full Results section due	Task 8, 9
14	November 18	November 20	Full Discussion section due	Task 10
15	November 25	November 27: NO CLASS		Task 11
16	December 2	December 4	Presentations due before class on Monday	Task 11
17	December 9		Final Exam in lecture; Final Paper due by end of lab	Task 11

PSYC 118: Advanced Research Methods in Psychology – 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

Program Learning Outcomes (PLOs)

Upon successful completion of the psychology major requirements, students will be able to:

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- 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.

The learning goals for this course fall into four categories that follow the construction of a research report. Learning outcomes for the first part of the course describes how the psychological sciences seek to gain knowledge about behavior and mental processes by running experiments and other types of studies. The second category will cover how scientific methods are used in psychological research. The third category will cover why statistics are important and

needed in psychological research, choosing the appropriate statistical analyses, and interpret the results. The final goal is to apply our learning by carrying out a planned research experiment with a full research report and presentation.

Course Goals and Student Learning Outcomes (CLOs)

Upon successful completion of this course, Psych 118 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, review of literature, assignments, and Final Exam.
- **CLO 2:** Understand how the scientific method is used in psychological research. *Assessment for this CLO will be assessed by class activities 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 be in class activities, review of literature, assignments, and Final Exam
- **CLO 4:** Understand why different research methods are needed for different research situations. *Assessment of this CLO will be conducted through, Lab activities, and Final Exam.*
- **CLO 5:** Understand and know the advantages and disadvantages of specific research methods. *Assessment of this CLO will be conducted through class activities*.
- **CLO 6:** Understand and know the vocabulary associated with psychological research methods. *Assessment of this CLO will be class and laboratory activities.*
- 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 class and lab activities, and Final 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 class assignments, research development process, and Final Exam.*
- CLO 9: Understand why statistics are important and needed in psychological research. Assessment of this CLO will be assessed by class assignments, research development, and Final Exam.
- **CLO 10:** Understand the meaning of statistical significance. *Assessment of this CLO will be class activities, research process, and the Final Exam.*
- CLO 11: Conduct statistical analyses and interpret the results. *This CLO will be assessed by laboratory assignments, the research report, and Final Exam.*
- 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 laboratory assignments, the research report, and Final Exam.*
- 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 and research presentation.

General information and policies

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's catalog, https://catalog.sjsu.edu/, policy section. The new Add/Late Drop Policy, \$22-6, will be implementing a new combined Add/Drop deadline of September 15 this semester. Find additional information here; Undergraduate Late Drop and Semester Withdrawal. Information about the latest changes and new is available at the Advising Hub at https://www.sjsu.edu/advising/

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."

Definition of a Credit Hour

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course. As an example, the expectation of work for a 3-credit course is 150 minutes of direct faculty instruction and six-hours of out-of-class student work each week.

Please review the following sources and policies, as well:

- University Syllabus Policy S16-9 at http://www.sjsu.edu/senate/docs/S16-9.pdf
- Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

Assignments and Grading Policy

SJSU classes are designed such that in order 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. Expect that your grades in Canvas will continue to change throughout the semester.

Academic integrity

Academic integrity is essential to the mission of San Jose State University. As such, students are expected to produce their own work (except when collaboration is expressly permitted by the course instructor) without the use of any outside resources. Students are not permitted to use old tests, quizzes when preparing for exams, nor may they consult with students who have already taken the exam. When practiced, academic integrity ensures that all students are fairly graded. Violations to the Academic Integrity Policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for oneself, fellow students, the course instructor, and can ruin the university's reputation and the value of the degrees it offers. The Student Conduct and Ethical Development is available at https://www.sjsu.edu/studentconduct/. Completing the library guides on avoiding plagiarism and paraphrasing will help you identify plagiarism and how to avoid it. Submission through Turn-It-In is required for all written assignments. Assignments not submitted using Turn-It-In, will not be graded until the problem is fixed. Work with IT to resolve any program issues that you may be having. If you have any questions, do not hesitate to ask me.

Grading Scale

Percent	Grade
100 - 94	A
93-90	A-
89-87	B+
86-84	В
83-80	В-
79-77	C+
76-74	С
73-70	C-
69-67	D+
66-64	D
63-60	D-
59 or below	F

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/.

Student Resources

Library Liaison

The SJSU library has a librarian who specializes in psychology (and other social sciences), and this librarian is a very valuable resource for helping you to locate appropriate research materials. The library has an abundance of resources for doing psychology research, see: http://libguides.sjsu.edu/psychology

Christa Bailey, 408-808-2422, christa.bailey@sjsu.edu or https://library.sjsu.edu/staff-directory/subject-librarians

Student Computer Resources

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

- For information regarding the loan of laptops, tablets, and other computer materials; https://library.sjsu.edu/student-computing-services/student-computing-services
- For IT Support visit https://www.sjsu.edu/it/support/service-desk/index.php
- For a list of software available to all SJSU students visit https://library.sjsu.edu/student-computing-services/software-available

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." Visit their webpage for more information and to schedule an online appointment, https://www.sjsu.edu/education/studentsuccesscenter/advising-and-tutoring.php.

Accessible Education Center (AEC)

Ability Redefined - Please reach out to me as soon as possible in the beginning of the semester, for any support. "If you need course adaptations or accommodations because of a disability, or if you need 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 requires that students with disabilities requesting accommodations must register with AEC to establish a record of their disability. "Academic Senate Policy F06-2 Indfl

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, or visit their webpage for more information: https://peerconnections.sjsu.edu/programs/tutoring/index.html

SJSU Writing Center

Check for different ways to access these services during the COVID-19 SIP.

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, or visit their webpage to make an online appointment at: https://www.sjsu.edu/writingcenter/

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 or visit their webpage, https://www.sjsu.edu/counseling/ Currently offered is a Therapist Assisted Online https://www.sjsu.edu/counseling/students/TAO/index.html "Therapy anytime, anywhere for anxiety and depression on your mobile device".