

Advanced Research Methods in Psychology Section 61

PSYC 118

Summer 2023 3 Unit(s) 06/05/2023 to 07/07/2023 Modified 05/27/2023

Contact Information

Dr. Mark Van Selst

Mark.VanSelst@SJSU.edu

(408) 924 5674

DMH 314

OFFICE HOURS: Mon-Thus 30 minutes before the start of class (11:30-12:00)

Library Liaison (PSYCHOLOGY): Christina Bailey

Email: christa.bailey@sjsu.edu

Phone: 408-808-2422

Website: <https://library.sjsu.edu/staff-directory/subject-librarians> (<https://library.sjsu.edu/staff-directory/subject-librarians>)

Course Description and Requisites

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

Prerequisite: Lower division GE complete; STAT 95, PSYC 18, PSYC 100W with a "C" or better (or departmental approval), Upper division standing, Psychology or Behavioral Science majors only.

Letter Graded

* Classroom Protocols

This course is an intensive introduction to the experimental tools used in the social and behavioral sciences. Students will be given the opportunity to develop an understanding of the principles and procedures involved in scientific research in psychology. The course includes both a lecture and a laboratory component. Grading will be based on written assignments (self-paced and in-class) and by formal testing. The expectation is that students will develop a firm grasp on the logic and application of the experimental method. The material covered includes design, methodology, and interpretation. Quantitative methods are emphasized, but criticisms of both quantitative and qualitative methods will be noted. The lectures will cover a broad range of topics in varying degrees of depth. The laboratory activities will cover a smaller range of topics in much greater depth than possible in the lectures. The laboratory activities are a crucial component of the course; many of you will find them indispensable in helping to clarify any questions you have about the lecture and text materials. Participation in the laboratory will be critically important to an understanding and completion of the course assignments.

Success in this course is based on the expectation that students will spend 45 minutes on preparation, studying, or lecture-related activities in addition to the 15 hours of lecture/discussion content and the additional in-person and outside activities related to the

laboratory/activity section.

Disruptive participants will be removed from the zoom meetings. This will have obvious negative effects on the ability to pass the course. The class requires active engaged participation from each of the students and a continuing commitment to help others in the class learn the material is expected. The dates assigned for pop quizzes and participation points will only approximate those presented in the schedule.

I am making the assumption that this class is your primary and dominant commitment for the entire period of each class meeting. "Splitting attention" is inappropriate and unlikely to yield success in the course. I expect the same level of attention as if this were an in-person class (i.e., it is unlikely that you'd get up to feed the dog, etc.).

Program Information

Program learning outcomes (PLOs) are skills and knowledge that students will have achieved upon completion of the Psychology BA degree. Each course in our curriculum contributes to one or more of these PLOs. The PLOs for the Psychology BA degree are:

1. **Knowledge Base of Psychology.** Students will be able to demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
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.
3. **Critical Thinking Skills.** 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.
4. **Applications of Psychology.** Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues.

Values in Psychology. Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.

Course Learning Outcomes (CLOs)

Upon successful completion of this course:

- CLO1 – Students will be able to design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations. [cf., Lab 1-3, 8, 9, 14, 16]
- CLO2 – 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. [cf., Lab 4, 7, 11, 16]
- CLO3 – Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society. [cf., lab 3, 4]

Course Materials

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found via the Canvas Learning Management System course login website at <http://sjsu.instructure.com>. 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. For help with using Canvas see Canvas Student Resources page (http://www.sjsu.edu/ecampus/teaching-tools/canvas/student_resources). The zoom links for class activities (i) will be sent based on course registration, (ii) may not be shared, (iii) recordings are generally prohibited and, if authorized, are only to be used for personal educational use, (iv) change for each day and (v) may require the SJSUone login for access.

Methods in Behavioral Research

Author: Paul Cozby & Scott Bates

Publisher: McGraw-Hill

Edition: 14th (or 12th/13th)

ISBN: 978-1260205589

Availability: campus bookstore

The definitions will follow the 14th but the 12th or 13th editions will be perfectly acceptable for use in the course.

APA Publication Manual

Author: APA

Publisher: APA

Edition: 7th

ISBN: 9781433832161

You should already have access to the APA manual from your PSYCHOLOGY 100W (Writing Workshop) course.

- In the case of a grading dispute regarding formatting the APA 7th manual is the controlling document.

Other technology requirements / equipment / material

- CANVAS
- ZOOM
- Web-camera (and a stable enough internet connection to allow full video participation)
- Graph paper (can be printed online)
- ruler
- Camscanner or similar picture to .pdf converter (needed for laboratory work uploads)

☰ Course Requirements and Assignments

There will be a final examination on Thursday July 6th (NOTE: this date is NOT flexible – make your travel plans accordingly). Additionally, I will require extra time to meet with you (on your schedule) during the last two weeks of the course outside of class time in order to work extensively with you on your implementation and early drafts related to your final project. In addition to time spent studying, the class structure requires extensive out-of-class time dedicated to design, data collection, online quizzes, and other assignments.

✓ Grading Information

Exams and quizzes will not be rescheduled except in the case of a medical or family emergency; in all cases, documentation will be required. If you need course adaptations or accommodations because of a disability, or if you need special arrangements, please make an appointment with me as soon as possible. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with Accessible Education Center (AEC) to establish a record of their disability (www.sjsu.edu/aec).

- The start and end time for the availability and due dates for many assignments are fixed based on prior and subsequent work so extensions or accommodations would negatively impact (disadvantage) other students.
- Credit may or may not be given for late assignments. Do not rely on “late” allowances being permitted. All late work that is permitted will be penalized a minimum of 10% of the possible total (minimum -.5 points per item). Papers are due at the beginning (within five minutes of the registrar’s scheduled start time) of the relevant class or laboratory meeting or as indicated on the CANVAS web-page. I will attempt to ensure that a copy of handouts and other assignment-related materials are available electronically via canvas (where possible).
- All work you turn in should be your own. It is your responsibility to be familiar with the scope, definitions, and recommended sanctions stated in SJSU policies on academic integrity. For many assignments, discussing the work with your classmates is encouraged; copying their work is not. Your own commitment to learning, as evidenced by your enrollment at San José State University, and the University’s Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Judicial Affairs. Substantive violations of the academic integrity policy

will yield (i) a zero on the assignment, (ii) a fail for the course, and (iii) a recommendation for academic disqualification from SJSU. For these reasons, if you have questions about the appropriateness of using a particular piece of work it is often best to check with the instructor and to cite sources wherever possible.

- Homework and/or laboratory assignments will be given weekly. A portion of some of these assignments will be graded (see evaluation breakdown below). The assignments will ensure that everyone keeps up with the reading, and should help you to assess whether you have mastered the basic concepts. The various assignments and the final exam are partially cumulative since later topics build naturally upon those covered earlier in the course.

- Most assignments will be due in electronic format via the CANVAS web-page. Access to a computer word processor is required for the assignments. Where the assignments require substantial written work, a scan of written work is not acceptable (i.e., I am generally looking for .pptx, .docx, or a machinereadable .pdf). It is your responsibility to have easy access to a back-up copy of any work that you hand in (keep multiple back-ups of any computer media and save your work often). It is also wise to retain developmental versions and research materials.

- TurnItIn is used for some written submissions, and submission of an image file or other formats that defeat assessment will be considered to be a deliberate violation of academic integrity policies.

- o University Syllabus Policy S16-9 (<http://www.sjsu.edu/senate/docs/S16-9.pdf>)

- o University Attendance and Participation Policy F15-12 (<http://www.sjsu.edu/senate/docs/F15-12.pdf>)

- o University Grading System Policy F18-5 (<http://www.sjsu.edu/senate/docs/F18-5.pdf>)

Criteria

Grade Points (total points possible for the course is /100)

A plus 95 to 100

A 92.5 to 95

A minus 90.0 to 92.5

B plus 87.5 to 90.0

B 82.5 to 87.5

B minus 80.0 to 82.5

C plus 77.5 to 80.0

C 72.5 to 77.5

C minus 70.0 to 72.5

D plus 67.5 to 70.0

D 62.5 to 67.5

D minus 60.0 to 62.5

F <60

Breakdown

LAB: 9.5 percent

CLASS PROJECT: 8.5 percent

INDIVIDUAL PROJECT: 20 percent

ACTIVITY ASSIGNMENTS: 7 percent

EXAMS: 46 percent

QUIZ: 9 percent

University Policies

Per [University Policy S16-9 \(PDF\)](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the [Syllabus Information](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) (<https://www.sjsu.edu/curriculum/courses/syllabus-info.php>) web page. Make sure to visit this page to review and be aware of these university policies and resources.