San José State University
Social Sciences/Department of Psychology
Psyc 120, Advanced Research Methods and Design,
Spring 2015, Section 20

| Instructor:       | Sandra Trafalis, PhD |
| Office Location: | DMH 230               |
| Telephone:       | (408) 924-5614        |
| Email*:          | Sandra.trafal@sjsu.edu |
| Office Hours:    | Wednesdays 1:00-3:00pm, or by appointment |
| Class Days/Time: | Lecture Tuesday/Thursday 4:30-5:45 Lab T: 6:00-8:00pm |
| Classroom:       | Lecture: DMH 347 Lab: DMH 339 |
| Prerequisites:   | Psyc 1, Stat 095, and Psych 100W |

Course Communication

Copies of the course materials such as the syllabus, major assignment handouts, etc. may be found on Canvas. You are responsible for regularly checking this site for updates. Please contact me via email through Canvas (due to the large volume of emails that I receive daily, please allow 1-3 days for a response). If you need an immediate answer or I have not gotten back to you, please stop by my office during office hours or call me. If you email me and do not receive a response within 1-3 days, please resend the email, and in the subject line, please indicate “2nd Request.” If you are calling during hours that are not part of my office hours, please call (408)-375-2545.

Please note that for some matters such as your grade, missed classes, and/or questions about missed assignments, it is best to see me in person during office hours. If you plan on stopping by please email me ahead of time so I know you plan to stop by. If you miss a class, you should get the notes from another student and review them prior to seeking out the instructor. I am happy to meet with students to discuss your performance in the class or answer questions about material and/or discuss the class with you. I invite you to stop by my office to talk with me.
Course Description

This course covers traditional laboratory experimental designs and methodology; experiments illustrating this approach. In addition, nonexperimental (e.g., survey, observational) and quasi-experimental methods (e.g., time series designs, nonequivalent groups designs) will be discussed. Statistical analyses appropriate for different designs will be covered. This course differs from traditional lecture-based classes in several ways. First, it requires the ability to translate concepts from readings into practice. Second, it requires much independent work outside the classroom. Third, it requires active participation in lecture and lab. Fourth, the class focuses less on lectures and more on practical in-class activities (e.g., meetings).

After completing this course, you should be able to critically examine claims made about human behavior—whether these claims are made by talk-show "experts," journalists, or behavioral scientists. More specifically, after completing this course, you should be able to

1. Explain why psychology is a science
2. Evaluate research on the basis of its construct validity, internal validity, external validity, statistical validity, and conformity to APA's ethical principles.
3. To plan and conduct studies using several different research designs
4. To identify and conduct appropriate statistical analyses of data obtained from several different research designs using APA
5. Conduct a literature review on topics in psychology.
6. Give a professional presentation of research findings
7. Work effectively in a research team
8. Write a APA-style research proposal and report

Course Goals and Student Learning Objectives

The goal of this course is to facilitate a basic understanding of experimental research method, including the basic statistical analyses to appropriately analyze experimental data. By the end of the course, you should be able to design an experiment and analyze the data utilizing SPSS and present your findings. You will also be able to write an APA style research paper.

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.

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.
**Labs:** Lab attendance is mandatory and critical to successful completion of this course. Please note that on some Lab days you will be doing “fieldwork” by collecting data and/or visiting the library. You are required to check in with me and update me on your progress. The labs provide you with opportunities:

1. To develop topics
2. To conduct literature searches
3. To make activity plans
4. To meet with Dr. Trafalis
5. To analyze data using SPSS
6. To write research reports
7. To complete Lab Assignments

**Course Requirements and Assignments**

**Classes:** Classes may include lectures, in-class activities, question-and-answer periods, guest lectures, 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.

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.

The primary method of assessment for this course will be a final research project and presentation of the project, lab activities and exams.

Information about dates are included in the Course Calendar.

**Labs:** Lab attendance is mandatory and critical to successful completion of this course. Access to DMH 339 (lab) is only available during scheduled class time so please make adequate arrangements (plan for the use of public computers at Clark Hall) to work on your projects. You will have access to computers during scheduled lab time, but if you need additional computer time you must make your own arrangements. You can also purchase SPSS through the bookstore or at Clark Hall.

The instructor will also assign lab work to prepare you to successfully complete your research papers. While the labs are not formally graded, failure to participate will likely mean you will have difficulty completing the research projects. If your team participates in the labs and you do not, it means that you are a social loafer and this is not good for morale of your team.
Required Texts/Readings

Textbook

Other Readings
There may be additional assigned readings available in Canvas

Other equipment / material requirements
1. SPSS Software and/or access to Clark hall computers with SPSS. Access to psycharticles/psychinfo through SJSU Library
2. Access to library/photocopier for research articles
3. Computer, printer, access to the internet and SJSU library access
4. No. 2 Pencil, Stapler

Classroom Protocol

Electronics Policy: You may not use cell phones, foreign language dictionaries, laptop computers, headphones, or any other electronic device during exams. Turn off all pagers, cell phones, headphones, etc. before class. Use of cell phones and other communication methods (e.g., text messaging) during class will result in dismissal from class

Attendance: Attendance to the class is very important and absences may impact your grade through the loss of participation points, in-class group activities, and video discussion questionnaires. Your participation and attendance is important. Peer learning is an important component and your active participation contributes to the quality of the class.

Tardiness: If you must arrive to class late, please enter the classroom quietly and without disruption to other students or the instructor. Excessive tardiness could impact your grade as you will likely miss important information, especially announcements and answers to student questions.

Please note that for some matters such as your grade, missed classes, and/or questions about assignments it is best to see me in person during office hours. If you plan on stopping by please email me ahead of time so I know you plan to stop by. If you miss a class, you should get the notes from another student and review them.

Office Hours: If you have to discuss your grade or need a grade check or have any questions related to your performance please wait until after class to discuss or make an appointment with me. This is so not to take up class time by discussing issues that are best done during office hours.
Email: I do not mind responding to questions over email, however, some issues are best discussed in person during my office hours. If I feel your question is best discussed in person, I will email you and ask you to stop by my office. Please contact me via email and due to the large volume of emails that I receive daily, please allow 1-3 days for a response. If you need an immediate answer or I have not gotten back to you, please stop by my office during office hours or call me and leave a voice message. I will respond to you as soon as possible.

If you plan on stopping by please email me or call ahead of time so I know you plan to stop by. If you miss a class, you should get the notes from another student and review them prior to seeking out the instructor.

In labs, you will not:
1. Check email or send emails, unless directly related to this course
2. Talk on your cell phone or send text messages, unless directly related to this course
3. Surf the internet, unless directly related to this course
4. “Shoot the bull” (i.e., engage in lengthy chats about topics unrelated to this course)

Assignments and Grading Policy

<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>Final Exam</td>
<td>1</td>
<td>100</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td>Lab Assignments</td>
<td>2</td>
<td>50</td>
<td>100</td>
<td>20%</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>100</td>
<td>100</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>500</td>
<td>100%</td>
</tr>
</tbody>
</table>

Course grades will be based on the number of points accumulated throughout the semester. The assignment summary table on page 3 of this syllabus provides the points associated with each assignment.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
</tr>
</thead>
<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>
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</table>
Final Exam: There will be a final exam in the class that is cumulative and based on the lectures and readings. Exams will be primarily multiple-choice, although there may be some short answer items. They will cover both text and lecture. Please bring a Scantron form and pencils to each exam.

Late Work: All assignments must be submitted by the scheduled due date. Late assignments will lose 20% of total points for every weekday that they are late. Assignments more than three weekdays late will not be accepted. Students submitting late assignments will not receive feedback from the instructor. DO NOT EMAIL LATE ASSIGNMENTS.

Make-up Exam: There are no make ups for missed exams unless there is a documented medical reason or excused absences because of a University event. If you know ahead of time that you cannot make an exam, please let me know. In the case of an excused absence from an exam, you may make the exam up on the day of the final.

Research Study: Your research team will develop a research topic within the parameters set by the instructor. The instructor will assign two of the three independent variables of the experiment and the research design must be a between subjects factorial design experiment. Students will design the relevant study, create stimulus materials, conduct the study, analyze the data, write an APA-style research report, and give a professional-quality presentation of your research findings. The paper will be at least 15 pages in length (double-spaced, typed, 12-point font) and will include between 20-25 scientific references. Students may utilize up to 2 popular articles (New York Times, Time Magazine, Newsweek) to demonstrate the social impact or significance of their study and/or findings. Dr. Trafalis must approve all topics and stimulus materials prior to data collection. Each research team will also present their study and its findings to the class in a 15-20 minute presentation. Peer evaluations will be considered as part of the final grade for the project. Not completing a peer evaluation will result in the loss of points for both the evaluator and evaluatee. Please remember to allow ample time as computers
fail, internet connections fail, the help desk needs more time to resolve, etc. Remember Murphy’s Law is likely to apply.

**Data Collection:** Students must complete the HPPERT tutorial PRIOR to collecting data. Please note that data collection must occur by the specified date on the syllabus and failure to collect data on time will result in the loss of points (10%)

**Peer Review:** Peer review is an important component to this course. Students who are not prepared for peer review date will be docked points (10%) on the final submission of the work.

**HPPERT Certificate:** To ensure students are fully aware of ethical considerations and guidelines in conducting research with human participants. Each student must complete the online tutorial offered by the National Institutes at [http://phrp.nihtraining.com/users/login.php](http://phrp.nihtraining.com/users/login.php).

You must save your certificate which you will turn in to the instructor in order to receive credit for the assignment. Late certificates will lose 15% points.

**University 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 Policies](http://info.sjsu.edu/static/catalog/policies.html) section at [http://info.sjsu.edu/static/catalog/policies.html](http://info.sjsu.edu/static/catalog/policies.html). Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at [http://www.sjsu.edu/aars/policies/latedrops/policy/]. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the [Advising Hub](http://www.sjsu.edu/advising/).

**Academic integrity**

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy S07-2](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. The [Student Conduct and Ethical Development website](http://www.sjsu.edu/studentconduct/) is available at [http://www.sjsu.edu/studentconduct/](http://www.sjsu.edu/studentconduct/).

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have
submitted, or plan to submit for another class, please note that SJSU’s Academic Integrity Policy S07-2 requires approval of instructors.

**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 the course.

- Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”
  - In order to obtain permission, please let me know of your request in person and permission will be granted in writing.
  - In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well by the student.
- Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

**Campus Policy in Compliance with the American Disabilities Act**

If you need course adaptations or accommodations because of a disability, or if you need to make 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* at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the *Disability Resource Center* (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

**Student Technology Resources**

Computer labs for student use are available in the *Academic Success Center* at http://www.sjsu.edu/at/asc/ located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library.

A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.
SJSU Peer Connections

Peer Connections, a campus-wide resource for mentoring and tutoring, strives to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. You are encouraged to take advantage of their services which include course-content based tutoring, enhanced study and time management skills, more effective critical thinking strategies, decision making and problem-solving abilities, and campus resource referrals.

In addition to offering small group, individual, and drop-in tutoring for a number of undergraduate courses, consultation with mentors is available on a drop-in or by appointment basis. Workshops are offered on a wide variety of topics including preparing for the Writing Skills Test (WST), improving your learning and memory, alleviating procrastination, surviving your first semester at SJSU, and other related topics. A computer lab and study space are also available for student use in Room 600 of Student Services Center (SSC).

Peer Connections is located in three locations: SSC, Room 600 (10th Street Garage on the corner of 10th and San Fernando Street), at the 1st floor entrance of Clark Hall, and in the Living Learning Center (LLC) in Campus Village Housing Building B. Visit Peer Connections website at http://peerconnections.sjsu.edu for more information.

SJSU Writing Center

The SJSU Writing Center is located in Clark Hall, Suite 126. All Writing Specialists have gone through a rigorous hiring process, and they are well trained to assist all students at all levels within all disciplines to become better writers. In addition to one-on-one tutoring services, the Writing Center also offers workshops every semester on a variety of writing topics. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the Writing Center website at http://www.sjsu.edu/writingcenter. For additional resources and updated information, follow the Writing Center on Twitter and become a fan of the SJSU Writing Center on Facebook. (Note: You need to have a QR Reader to scan this code.)
SJSU Counseling Services (Optional)

The SJSU Counseling Services is located on the corner of 7th Street and San Fernando Street, in Room 201, Administration Building. Professional psychologists, social workers, and counselors are available to provide consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit Counseling Services website at http://www.sjsu.edu/counseling.
# Psyc 120, Advanced Research Methods and Design*

Planned Course Schedule for Lecture: Please note that this is the planned course schedule and this calendar may be revised to accommodate student learning. Changes will be announced in class.

## Calendar

<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Topic</th>
<th>Lab Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td>1/22 Introduction to class</td>
<td><strong>Week 1 Group Member Selection Process</strong></td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td>1/27 &amp; 1/29 What is Science?</td>
<td><strong>Week 1 –Week 6</strong> Conduct literature review Development of hypotheses Selection of Factors for your experiment Design the experimental questionnaire &amp; Stimulus Materials</td>
</tr>
<tr>
<td><strong>Week 3</strong></td>
<td>2/3 &amp; 2/5 Ethics in Research</td>
<td></td>
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<tr>
<td><strong>Week 4</strong></td>
<td>2/10 &amp; 2/12 Independent and Dependent Groups Design</td>
<td><strong>LAB #1 Ethics Certificate</strong> Due by Wed by midnight of Week 6 Ethics training found on <a href="http://phrp.nihtraining.com/users/login.php">http://phrp.nihtraining.com/users/login.php</a> You will need to upload your certificate to Canvas—you will need to cut and paste the certificate into a word document or equivalent and then upload the file. Failure to submit to Canvas could lead to a deduction of points You cannot collect data without a completed certificate.</td>
</tr>
<tr>
<td><strong>Week 5</strong></td>
<td>2/17 &amp; 2/19 Hypothesis Testing</td>
<td><strong>Week 5 –Week 6</strong> Conduct literature review Develop statement of hypotheses Selection of Factors for your experiment Design the experimental questionnaire &amp; Stimulus Materials</td>
</tr>
<tr>
<td><strong>Week 6</strong></td>
<td>2/24 &amp; 2/26 Measuring Variables: Manipulating Independent Variables &amp; Measuring Dependent Variables</td>
<td><strong>Preparation of Stimulus Materials and Completion of Data Collection plan Peer Review Day</strong>: Please bring Lab #2 in for peer review. Your stimulus materials must also be part of the peer review process. We will use lab Time for PEER REVIEW. Bring Stimulus Material Checklist to Lab—8 Copies You will need 1 set of each of your stimulus materials</td>
</tr>
<tr>
<td><strong>Week 7</strong></td>
<td>3/3 &amp; 3/5 Communicating Your Proposed Research Effectively</td>
<td><strong>Lab #2 Literature Review, Hypotheses, and Methodology and Stimulus Materials &amp; Informed Consent Due by Wed by midnight of Week 8</strong></td>
</tr>
<tr>
<td><strong>Week 8</strong></td>
<td>3/10 &amp; 3/12 Analyzing your Data: Descriptive Statistics Analysis of Variance</td>
<td><strong>Week 8 –Week 9</strong> Collect Data for Research Project <strong>Collect Data for Research Project</strong> YOU MUST COMPLETE DATA COLLECTION THIS WEEK</td>
</tr>
<tr>
<td><strong>Week 9</strong></td>
<td>3/17 &amp; 3/19 Analyzing your Data: Descriptive Statistics Analysis of Variance</td>
<td><strong>Collect Data for Research Project</strong></td>
</tr>
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**Monday- Friday March 23- 27.................Spring Recess **********Have a Good Spring Break!**********

**Week 10** 4/2 Communicating Results Reminder Campus Closed--3/31 Collect Data for Research Project

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*Advanced Research Methods and Design, Psyc 120*
<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Topic</th>
<th>Lab Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 11 4/7 &amp; 4/9</td>
<td>The Discussion Section Explaining what you found</td>
<td>Input &amp; Analyze Data in SPSS Individual Group Meetings with Instructor</td>
</tr>
<tr>
<td><strong>Week 12 4/14 &amp; 4/16</strong></td>
<td>Writing Tips for Your Final Paper <strong>Peer Review Day:</strong> Please bring Results Section &amp; Discussion Section in for peer review. Your stimulus materials must also be part of the peer review process. They must be updated to reflect what was actually distributed to participants. This is likely different from what you submitted for Lab #2.</td>
<td>Analyze Data in SPSS Individual Group Meetings with Instructor</td>
</tr>
<tr>
<td><strong>Week 13 4/21 &amp; 4/23</strong></td>
<td>Student Presentations***</td>
<td>All Data inputted and analyzed Prepare results section and discussion section</td>
</tr>
<tr>
<td><strong>Week 14 4/28 &amp; 4/30</strong></td>
<td>Student Presentations ***</td>
<td>Prepare Abstract, Reference Pages, Assemble Appendices</td>
</tr>
<tr>
<td><strong>Week 15 5/5 &amp; 5/7</strong></td>
<td>Student Presentations ***</td>
<td>Incorporate instructor feedback/peer review feedback. Your final paper includes: Title Page, Abstract, Introduction, Results, Methods, Discussion, References, SPSS Output, Data File, Data Collection Tool.</td>
</tr>
<tr>
<td><strong>Week 16 5/12</strong></td>
<td><strong>Wrap up and Review</strong></td>
<td>Complete Final Paper</td>
</tr>
<tr>
<td><strong>Final Papers are Due by 5/14 Midnight</strong></td>
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<tr>
<td>Final Exam</td>
<td><strong>Friday, May 15 1445-1700</strong></td>
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</table>

- *Found in CANVAS
- **You will pilot test your materials, but due to time/space restrictions, it is possible you may not be able to pilot test all of your conditions. It is your responsibility to bring stimulus materials to lab and the checklist. Out of courtesy and time constraints, there will be no printing of stimulus materials during lab. NO EXCEPTIONS
- ***The presentation schedule will be posted to CANVAS.