Instructor Contact Information

Instructor: Dave Schuster, Ph.D.

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Office Hours: Tues. & Thurs., 2:30pm – 3:30pm

Course Information

Classroom DMH 355

Class Days/Time: Tues. & Thurs., 12:00pm – 1:15pm

Prerequisites PSYC 001 or equivalent and STAT 095 or equivalent

Course Description

The major goal of this course is for you to understand and evaluate claims from the perspective of the social scientist. This course will introduce you to research in psychology and prepare you to design your own research. Skills developed in this course will be useful to critical thinkers in a data-driven society.

From the catalog: Psychological research methods and design (experimental, quasi-experimental [correlational], and descriptive investigations) covering observation, instrumentation, and the collection, analysis, interpretation, and reporting of research data as illustrated through a review of original research in a variety of the subdisciplines of psychology.

Course Format

A mobile device with internet access is required, as described below.

Learning Outcomes

Program Learning Outcomes

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

- PLO1 – Knowledge Base of Psychology – identify, describe, and communicate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology
Course Learning Outcomes
The objective of this course is to provide you with a solid introduction to psychological research. We will examine the logic and strategies of scientific research and learn how to use statistics to draw conclusions from data. You will learn what research methods are available, when to use specific research methods, and how to interpret research results.

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

- CLO1 – Explain the basic principles of the scientific method
- CLO2 – Distinguish between experimental, quasi-experimental, and non-experimental methods
- CLO3 – Strategically select appropriate research designs
- CLO4 – Make inferences from research
- CLO5 – Critique the validity of inferences from research
- CLO6 – Explain the ethical treatment of human and animal participants in research and the institutional requirements for conducting research
- CLO7 – Apply statistical analysis and the logic of hypothesis testing to address research questions
- CLO8 – Demonstrate familiarity with APA style
- CLO9 – Identify mentorship opportunities in science

The learning objectives will be assessed via written assignments and exam questions.

Required Materials

Canvas and E-Mail
Unless otherwise announced in class, all graded assignments will be accepted only in electronic form using the Canvas learning management system assignments page (Canvas is available at https://sjsu.instructure.com/). Having access to the Internet is your responsibility, so have backup plans in case you have problems with your primary computer. I cannot accept excuses about technology problems as valid, unless the entire University network or all of Canvas is offline.

Supplementary course material will be made available on Canvas regularly. Communication regarding the course will be sent via the e-mail address linked to your MySJSU account or posted to Canvas. It is your responsibility to make sure you are enrolled in Canvas and receiving my e-mails.

Required Textbook
**SPSS**
Some assignments may require you to perform analysis outside of class using SPSS and bring the output to class for interpretation.

To use SPSS, it is intended that you obtain a copy of SPSS for your own computer using the SJSU site license at no cost. Instructions to download, install, and license SPSS are available on the software downloads web site at [https://www.sjsu.edu/it/services/collaboration/software/instructions.php](https://www.sjsu.edu/it/services/collaboration/software/instructions.php).

**Mobile Device**
This course requires a mobile computing device for class activities, preferably a laptop or tablet. A smartphone will also work, but a laptop is recommended. The mobile computing device must support HTML5 web browsing, spreadsheets, a calculator, a stopwatch, and word processing. You will have the best experience if you can bring a laptop to class. It is not recommended to use a mobile phone for this purpose. I trust that you will avoid using your technology to distract your classmates, as off-topic technology use will not be tolerated. Note that mobile devices will not be permitted during exams.

**Grading Policy**

**How to be Successful in this Course**
It is **essential** that you make time before every class meeting to:

- Check Canvas and your e-mail for course announcements and changes
- Check this syllabus for due dates and upcoming assignments
- Read the assigned textbook chapters
- Read the relevant course pack sections
- Complete the quiz
- Attend the class meetings
- Complete the activity that corresponds with the lecture
- Ask questions in class and/or via e-mail

**Determination of Grades**
Grades will be available to you on Canvas throughout the course. Grades are assigned based on your final point total out of 1000 points for the course:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>&gt; 965 points</td>
</tr>
<tr>
<td>A</td>
<td>916 to 965 points</td>
</tr>
<tr>
<td>A-</td>
<td>896 to 915 points</td>
</tr>
<tr>
<td>B+</td>
<td>866 to 895 points</td>
</tr>
<tr>
<td>B</td>
<td>816 to 865 points</td>
</tr>
<tr>
<td>B-</td>
<td>796 to 815 points</td>
</tr>
<tr>
<td>C+</td>
<td>766 to 795 points</td>
</tr>
<tr>
<td>C</td>
<td>716 to 765 points</td>
</tr>
</tbody>
</table>
C-  696 to 715 points
D+  666 to 695 points
D   616 to 665 points
D-  595 to 615 points
F   < 595 points

**Rounding is Included in the Grading Scale**
The point totals reflect rounding up to the nearest percentage. For example, an A- would normally require 900 points (or 90% of 1000 points). With rounding, it only requires 896 points (or 89.6% of 1000 points). Because rounding is built in to the grading scale, your grade will be based on your final point total, rounded to the nearest whole point (so, 895.6 points is an A-, but 895.4 points is a B+). To be fair to everyone in the class, these are firm cutoffs.

**Make-Up and Extension Policy**
Make-ups or extensions for any graded assignment will only be given when:

- You notify me immediately after you become aware of the circumstances requiring a make-up or extension by filling out this request form at [http://goo.gl/forms/0yJQ2KbvtP](http://goo.gl/forms/0yJQ2KbvtP).
- The reason is exceptional, unforeseen, and unavoidable. Examples of exceptional circumstances are health emergencies, religious obligations, and military service. Work scheduling is not a sufficient reason for a make-up or extension.
- You provide written documentation.

Unless you have questions about this policy, do not e-mail me with requests for a make-up or extension; instead, complete the request form.

**Course Requirements and Assignments**

**Activities**
*Activities are 25% of your final grade (250 points total)*

Ten activities are worth 28 points each (the first is worth 26 points), but the lowest one is dropped. This leaves 9 activities worth 28 points each, for a total of 250 possible points. Typically, our second class meeting each week will be dedicated to completing an activity. The activities are designed to give you hands-on practice with the techniques discussed in the lecture and handouts. You will receive points for completing all required parts of the assignment as described in the assignment instructions. No partial credit is given. Because this is a collaborative assignment, you must be present for the activity and the reflection question in order to receive credit. Occasionally, you may not have time to finish the activity by the end of class. If this happens, I strongly encourage you to complete the activity on your own. Always check your completed work against any answer key posted to Canvas for feedback on your mastery. I am always happy to answer your questions about the activities, discuss strategies, and/or provide additional feedback on your work.

**Quizzes**
*Quizzes are 15% of your final grade (150 points total).*
Eleven quizzes are worth 15 points each, but the lowest one is dropped. This leaves 10 quizzes worth 15 points each, for a total of 150 points. Most weeks, a quiz will be assigned within Canvas. You may use support materials (your textbook, web sites, and your notes) when you take your quiz, but you must take your quiz alone without the help of any other live individual. You may not communicate with anyone except the instructor during a quiz. Doing so is academic dishonesty. For example, you may refer to the web page of a textbook during a quiz, but you may not send e-mails to someone while you take a quiz. As with activities, I am always happy to answer your questions following the quiz or discuss its concepts in more detail.

In summary: books and notes are okay for quizzes. Live help is not okay for quizzes. Please let me know if you have questions about what is allowed during quizzes or exams.

**Exams**

*Exams are 60% of your final grade (600 points total).*

Three exams are worth 200 points each. Each exam will focus on applying the knowledge learned in the previous part of the course. The third exam is a cumulative final exam. Your cumulative final exam grade will replace any lower grade on previous exams.

You may bring and refer to any handouts in class and your notes on the quizzes and exams. Although books are not permitted, you may reproduce published material as part of your notes. No electronic devices will be allowed. Materials used during an exam are subject to inspection. All other assistance is prohibited. If you will need to refer to any digital materials, you will need to print them out ahead of time. If you have any questions about what material is allowed, ask me.

**Final Examination or Evaluation**

The third exam is a cumulative final exam in the format described above.

**Spring 2020 Extra Credit**

This year’s Spartan Psychological Association Research Conference will be held on Monday, April 20, 2020. You may earn 20 points of extra credit by attending the keynote speech (Dr. Erin Flynn-Evans) and submitting 1-2 paragraphs on Canvas describing how any concept in this course connects to the talk. If you are unable to attend the keynote, you may instead read a journal article published by Dr. Flynn-Evans and submit 1-2 paragraphs connecting concepts in the article to the course. The paragraphs are due by class time on April 23.

**Classroom Protocol**

We will be working in groups frequently. This will only work if you come prepared to class, arrive on time (entering quietly if you are late), silence your electronics, are polite and respectful to everyone in the room, refrain from off-topic activities during lecture or group work, and speak up when you are confused, have questions, or need help.

**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/)

You must obtain the instructor’s permission to make any audio or video recordings in this class.
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 practica. Other course structures will have equivalent workload expectations as described in the syllabus.

**Academic Integrity**
Please don’t cheat. I will not tolerate academic dishonesty in my courses. You can expect me to follow all University policies and protocols regarding the handling of suspected academic dishonesty. Penalties may include expulsion from SJSU. Software and statistical analysis may be used to detect academic dishonesty.

**About Diversity**
Consistent with the mission of San José State University, I welcome persons of differing backgrounds and experiences including but not limited to age, disability and health status, ethnicity and race, family structure, geographic region, language, religious/spiritual and secular beliefs, resident status, sex, sexual orientation, gender identity/expression, and socioeconomic status.

It is my goal to foster an environment in which diversity is recognized and embraced, and every person is treated with dignity, respect, and justice. I hope that your academic experience in this course and at San José State University will provide the opportunity to gain knowledge and experiences necessary to thrive in a diverse, global environment.
Course Schedule

The course schedule is tentative and likely to change; modifications will be posted to Canvas.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Readings</th>
<th>Quiz Due by class start time on Thursday</th>
<th>Activity Multiple parts; see instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thu., Jan. 23</td>
<td>Introduction and review</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Tue., Jan. 28Thu., Jan. 30</td>
<td>The scientific method</td>
<td>Chapter 1</td>
<td>Quiz 1</td>
<td>Activity 1</td>
</tr>
<tr>
<td>3</td>
<td>Tue., Feb. 4Thu., Feb. 6</td>
<td>Operational definitions &amp; measurement</td>
<td>Chapter 3</td>
<td>Quiz 2</td>
<td>Activity 2</td>
</tr>
<tr>
<td>4</td>
<td>Tue., Feb. 11Thu., Feb. 13</td>
<td>Hypothesis testing</td>
<td>Chapter 2</td>
<td>Quiz 3</td>
<td>Activity 3</td>
</tr>
<tr>
<td>5</td>
<td>Tue., Feb. 18Thu., Feb. 20</td>
<td>Exam review (Tue.)</td>
<td>Exam 1 (Thu.)</td>
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<tr>
<td>6</td>
<td>Tue., Feb. 25Thu., Feb. 27</td>
<td>Validity and reliability</td>
<td>Chapter 4</td>
<td>Quiz 4</td>
<td>Activity 4</td>
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<tr>
<td>7</td>
<td>Tue., Mar. 3Thu., Mar. 5</td>
<td>Descriptive designs</td>
<td></td>
<td>Quiz 5</td>
<td>Activity 5</td>
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<tr>
<td>8</td>
<td>Tue., Mar. 10Thu., Mar. 12</td>
<td>Causality</td>
<td>Chapter 5</td>
<td>Quiz 6</td>
<td>Activity 6</td>
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<td>9</td>
<td>Tue., Mar. 17Thu., Mar. 19</td>
<td>Experimental designs</td>
<td>Chapter 6</td>
<td>Quiz 7</td>
<td>Activity 7</td>
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<td>10</td>
<td>Tue., Mar. 24Thu., Mar. 26</td>
<td>Exam review (Tue.)</td>
<td>Exam 2 (Thu.)</td>
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<td>11</td>
<td>Tue., Mar. 31Thu., Apr. 2</td>
<td>Spring Break</td>
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<td>12</td>
<td>Tue., Apr. 7Thu., Apr. 9</td>
<td>Experimental designs, continued; quasi-experimental designs</td>
<td>Chapter 7</td>
<td>Quiz 8</td>
<td>Activity 8</td>
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<td>13</td>
<td>Tue., Apr. 14Thu., Apr. 16</td>
<td>Evaluating literature</td>
<td>Chapter 8</td>
<td>Quiz 9</td>
<td>Activity 9</td>
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<tr>
<td>14</td>
<td>Tue., Apr. 21Thu., Apr. 23</td>
<td>Moderating, mediating, and confounding variables</td>
<td>Chapter 9</td>
<td>Quiz 10</td>
<td>Activity 10</td>
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<tr>
<td>15</td>
<td>Tue., Apr. 28Thu., Apr. 30</td>
<td>Statistics and effect size</td>
<td>No class meeting (Thu.)</td>
<td>Quiz 11</td>
<td></td>
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<td>16</td>
<td>Tue., May 5Thu., May 7</td>
<td>Statistics and effect size, continued</td>
<td>Chapter 10</td>
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<tr>
<td>Final</td>
<td>Wed., May 13</td>
<td><strong>Exam 3: 9:45am- 12:00pm</strong></td>
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