Contact Information

Instructor: Greg Savage, M. A.
Office Location: Sweeney Hall 340
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Email: Gregory.Savage@sjtu.edu
Office Hours: Mondays and Wednesdays from 1:30 to 2:30 PM or by appointment
Class Days/Time: Mondays and Wednesdays, 10:30 to 11:45 AM
Classroom: Clark Hall 117
Prerequisites: Satisfaction of ELM requirements and 2 years of H.S. Algebra

Course Description

This course covers basic statistical concepts and different types of statistical methods that are used in research. The topics that will be covered include a general introduction to the topic of statistics, variables and data values, samples and populations, descriptive statistics, frequency distributions and histograms, correlations and scatterplots, linear regression, probability and probability distributions, normal distributions and probability, sampling distributions, confidence intervals, and hypothesis testing.

Course Goals and Learning Objectives

Course Learning Outcomes (CLO)

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

CLO 1- Understand statistical concepts and vocabulary

CLO 2- Understand the statistical methods covered during the semester, including when they are used, how they are used, and why they are used in addition to the logic/theory behind each method and what each method is able to accomplish.
CLO 3- Be able to determine what statistical method should be used in a certain situation, use that method, and then correctly interpret the results.

CLO 4- Be able to perform certain statistical calculations and / or graphing of data

CLO 5- Be able to solve problems involving statistics

CLO 6- Be able to perform statistical calculations or graphing with real sets and be able to interpret the results

CLO 7- Be able to use statistical software

CLO 8- Understand how statistical methods fit into the big picture of research including why they are needed, how they are used, and what they are able to accomplish.

CLO 9- Understand the limitations of statistical inference in general and in specific situations

CLO 10- Understand the factors that can affect the validity of the results of a statistical procedure and be able to determine whether the results of a statistical procedure are valid in a certain type of situation.

Program Learning Outcomes (PLO)
Upon successful completion of the psychology major requirements…

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 – Students will be able to 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.
Required Texts/Readings

Textbook

Other Readings
Students might be asked to read my lecture notes before class.

Other equipment / material requirements (optional)
Students will need to be able to use Excel and possibly SPSS. I have heard that an inexpensive student version of SPSS can be purchased in Clark Hall. Students will need to have internet access outside of class. Students will need to have a basic calculator that can add, subtract, multiply, divide, square numbers, and find square roots.

Course Requirements and Assignments
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.

Exams: Two exams and one non-cumulative final exam will take place during the quarter. Exams will include mostly multiple choice questions, short answer questions, and questions that ask students to perform calculations or graphing and write out their steps and their answers on the exam sheet. Each exam will also include short essay questions. The short essay questions will be selected from the short essay questions that appeared on the homework assignments. Each student can have one page of notes with writing or typing on the front and back for each exam. I will give out a study guide for each exam. The study guide will be sent out one section at a time. After each class, I will send out a study guide for the material that was covered during that class. I will also try to set aside at least some time during the class period before each exam for us to review for the exam as a class. This review time will need to be focused on understanding the material that we covered in class and not on asking questions about what material from the study guide will be on the exam. If there is not enough time to have a review session for an exam in class, I will let students ask me questions about the material though email, and I will post my explanations and answers to students’ questions online. Even though the final exam is not technically cumulative, it will be important to remember information from earlier in the semester because later topics build on earlier topics. All information that is mentioned in class, written on the whiteboard in class, or sent out to the class in the form of typed lectures, powerpoints, drawings/diagrams, or videos is material that I might ask about on exams. However, I won’t ask questions on topics in the textbook that were not covered elsewhere. Taking an exam at a different time than the rest of the class requires documentation. Cheating on exams will not be tolerated. Please refer to the section on Academic Integrity for information on the consequences of cheating.
Pre-class Assignments: Each week, I will send out a typed version of my lecture, a video, or both that will cover material that will be discussed during the following week of class. Students will be asked to read the typed version of the lecture, watch the video, or both. By 12 AM on Sunday, each student will need to send me his or her feedback. If a typed lecture was sent out, each student will need to send me a paragraph of at least nine sentences describing what he or she learned while reading the typed lecture and what he or she would like to be explained further and why. If a student thinks that he or she doesn’t need any more explanation on any of the information, then the student can write about he or she found to be the most helpful or the most interesting. If a video was assigned, then each student will need to write the same type of paragraph about the video. If both a typed lecture and a video were assigned, each student will need to write both paragraphs (one about the typed lecture and one about the video). At least two of the nine sentences in each of your paragraphs need to be either about what you would like to be explained further and why or about what you found to be the most helpful or interesting. Each of these assignments is due on Sunday at 12 AM. Each of these assignments will lose 10% of credit for each hour that it is late, which means that it won’t be possible to get any credit for an assignment submitted after 10 AM on Sunday. Students must submit their own paragraphs and not paragraphs copied from other students or from any other source.

Homework Assignments: Each week, a weekly homework assignment will be assigned that will be due on the following Monday. If you know that you will be missing class on Monday, you will need to scan or take a photo of your homework assignment and email it to me before class time to avoid losing credit. The homework assignment will focus on the current week’s topic(s). Each homework assignment will have two sections. The first section might include multiple choice questions, fill-in the blank questions, matching questions, short answer questions, or questions to which the answer is just a value that you have calculated. Some questions might require you to perform hand calculations or graphing, some questions might require for you to use software, and other questions might only require you to understand the concepts. Not all questions will require you to use formulas or a series of steps to reach the answer. Some questions will just require you to understand a certain concept or idea. Most of the questions will be my own questions. However, questions might also be selected from the textbook. The second part of each homework assignment will include three short essay questions that focus on the current week’s topics. I will select a certain number of the short essay questions that you have answered on the homework assignments to be on the exam. The reason why I am including the short essay questions on the homework assignments is so that I can provide students with feedback on their answers before they answer the questions on an exam. Students’ grades on the homework assignments will calculated based on the number of questions answered correctly. Students can receive partial credit on their answers to certain homework questions if their answers are partially correct but not completely correct. On each short answer or short essay question, each student will receive a fraction or percentage score that reflects the extent to which the student correctly covered the important points that I was expecting students to include in their answers to that question. Each weekly homework assignment is due on the Monday after it is assigned. Each weekly homework assignment will lose 10% of credit for each day that it is late. Each homework assignment will end with an extra credit survey that is worth up to 2% of extra credit on the next exam.
In-class assignments: Students will be asked questions during lecture and will be asked to write their answers on a piece of paper. The questions will be presented on the projector or on the chalkboard. These questions will be multiple choice questions or matching questions. These questions will be mostly questions that require students to remember and understand a certain topic, idea, or concept. However, it is possible that certain questions will ask students to perform calculations or graphing. After I put a question on the projector, each student will write down the answer that he or she thinks is correct without talking to other students or looking at other students’ answers. Next, each student will have 1-2 minutes to talk about the question with other students or to continue thinking about the question. Next, each student will re-answer the question individually. At this time, I will also put my explanation of the correct answer on the projector with certain words blanked out, and students will need to individually write out my explanation of the answer while filling in the blanks. I will give students choices that they will use to fill in the blanks. Finally, I will show the correct answer and my complete explanation of the correct answer. At this point, each student will make corrections to his or her answer to the multiple choice question and to the words that he or she selected to fill in the blanks. Students will receive credit on these assignments based on the extent to which they fully complete them (including making the corrections). In other words, there is no penalty for selecting incorrect answers. I might also at certain times ask questions that only require students to choose an answer and then correct their answers without having discussions with other students. The questions that are asked in class are not the same questions that will appear on exams. Each day’s in-class assignment is due at the end of class and cannot be made up if a student misses class.

NOTE that University policy F69-24, “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.”

**Grading Policy**

Exam 1 – 20 points (20% of your grade)
Exam 2 - 20 points (20% of your grade)
Final Exam- 20 points (20% of your grade)
Homework Assignments – 20 points (20% of your grade)
Pre-class Assignments- 10 points (10% of your grade)
In-class Assignments – 10 points (10% of your grade)

Grading Scale:

- **A** - 90 – 100%
- **B** – 80 – 89%
- **C** – 70 – 79%
- **D** – 60 – 69%
- **F** – 59% and below
Classroom Protocol

Class Sessions: Class sessions will include lectures, question and answer sessions with discussion, and possibly review sessions for exams or other in-class activities. The lectures will be broken up by the in-class question and answer sessions and possibly other in-class activities. To make time for the in-class activities, the lectures might not cover all of the information that was sent out to students before class. The lectures might also include explanations or examples that were not included in the information that was sent out to students before class. For example, the lectures might include explanations or examples that I forgot to include in the typed lectures or videos, explanations or examples that I developed after reading students’ feedback during the weekend, or explanations or examples that are more easily presented in class. I will often but maybe not always show powerpoints during class. All powerpoint slideshows that I present to the class will be sent to the entire class through email or uploaded online. However, I won’t upload the sets of powerpoints that include the questions and answers until after we have used them in class. The lectures do not necessarily follow the order of the textbook and might cover topics, concepts, ideas, information, or procedures that are not covered in the textbook. I will be creating an index that shows where each topic that we cover can be found in the textbook (if it is covered in the textbook). In statistics, you sometimes find a variety of terms that all have the same meaning. If a certain term has different variations, I will try to mention those variations in the index that I create. I will do this to avoid any confusion that might arise from different versions of a term being used in class and in the textbook.

Attendance: Attending class is important because the material being discussed will be covered on exams and assignments. Also, if you miss class on a certain day, you won’t be able to make up the in-class assignment for that day.

Arrival times: Please come to class on time if it is at all possible. If you know that you will be late to class, please let me know ahead of time.

Behavior: Please be respectful of the other students in the class and myself. Please do not talk on cell phones, send text messages, send emails, or browse the internet during class. Please do not use laptops for note-taking during class. Please actively participate with other students and be respectful toward the instructor and other students during our question and answer sessions and other in-class activities.

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 section at 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 at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop 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 at http://www.sjsu.edu/advising/.

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.”
  - It is suggested that the greensheet include the instructor’s process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
  - 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.
- “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.”

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 at 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 is available at 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.

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 Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of your disability.

In 2013, the Disability Resource Center changed its name to be known as the Accessible Education Center, to incorporate a philosophy of accessible education for students with disabilities. The new name change reflects the broad scope of attention and support to SJSU students with disabilities and the University's continued advocacy and commitment to increasing accessibility and inclusivity on campus.

**Student Technology Resources (Optional)**

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 (Optional)**

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 (Optional)**

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.
San Jose State University  
Statistics 95: Elementary Statistics, Section 3,  
Fall Semester 2014,  
Course Schedule

Course Schedule: This schedule is subject to change with fair notice. I will inform 
students of any changes made to the schedule through email.

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<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
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<td>M Aug 25</td>
<td>Introduction to Course</td>
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<td></td>
<td>W Aug 27</td>
<td>Introduction to Statistics, Data Values and Variables</td>
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<td>2</td>
<td>M Sept 1</td>
<td>Labor Day – Campus Closed</td>
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<td></td>
<td>W Sept 3</td>
<td>Introduction to Statistics, Data Values and Variables</td>
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<td>3</td>
<td>M Sept 8</td>
<td>Samples and Populations</td>
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<td>W Sept 10</td>
<td>Samples and Populations</td>
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<td>Descriptive Statistics</td>
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<td>W Sept 17</td>
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<td>5</td>
<td>M Sept 22</td>
<td>Frequency Distributions and Histograms</td>
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<td></td>
<td>W Sept 24</td>
<td>Correlations and Scatterplots</td>
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<td>W Oct 1</td>
<td>Linear Regression</td>
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<td>W Oct 15</td>
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<td>M Nov 10</td>
<td>Confidence Intervals</td>
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<td>Confidence Intervals</td>
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<td>13</td>
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<td>W Nov 19</td>
<td>Introduction to Hypothesis Testing</td>
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<td>Hypothesis Test of a Correlation Coefficient</td>
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<td>Two Sample t test for Population Means</td>
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<td>W Dec 10</td>
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