

**San José State University  
Psychology Department  
STATS 095, Elementary Statistics, Sections 2 and 3**

**Spring, 2012**

Instructor:	Michael Abrams, Ph.D.
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Class Days/Times/Locations:	Sec. 2: TR, 7:30-8:45, DMH 348 Sec. 7: TR, 9:00-10:15, DMH 226B
Office Hours:	Tues., Thurs.: 10:30-11:30, 1:00-1:30 Other times by appointment
Prerequisites:	Satisfaction of ELM requirement and two years of high school algebra.
GE/SJSU Studies Category:	B4

**Desire to Learn/Aplia**

Desire to Learn (D2L): this is software used by SJSU to manage courses. You should have an account on D2L already. While this course is listed on D2L, we will only be using it to hand in written assignments.

Aplia: this is software associated with the text which we will be using to do assignments and administer the course. To create an Aplia account, go to [www.aplia.com](http://www.aplia.com) and follow the directions. The course key is: FDEB-VTD9-8BTM. More information is posted on D2L.

**Course Description**

Organization and classification of data, graphic representation, measures of central tendency and variability, percentiles, normal curve, standard scores, correlation and regression, and introduction to statistical inference; use of microcomputers for statistical calculations.. Note: intended mainly for majors in education, nursing, personnel administration, psychology, social service and sociology, and psychology minors.

**Course Goals and Student Learning Objectives**

This course is designed as an overview of and introduction to the application of statistics in the behavioral sciences. It is also intended to help students learn how to interpret statistics and be better consumers of statistics.

## **Course/GE Learning Objectives and Their Assessment:**

**Objective 1:** Mathematical concepts courses should prepare the student to use mathematical methods to solve quantitative problems, including those presented in verbal form. Students will satisfy this learning objective by completing the SPSS assignment: Frequencies and Descriptive Statistics. They will also be assessed by exam items.

**Objective 2:** Mathematical concepts courses should prepare the student to demonstrate the ability to use mathematics to solve real life problems. Students will satisfy this learning objective by completing the SPSS assignment: Correlation and Scatterplots. They will also be assessed by exam items.

**Objective 3:** Mathematical concepts courses should prepare the student to arrive at conclusions based on numerical and graphical data. Students will satisfy this learning objective by completing the SPSS assignment: t-test. They will also be assessed by exam items.

## **Required Text:**

Gravetter, Frederick J. and Wallnau, Larry B. (2011) *Essentials of Statistics for the Behavioral Sciences*. Belmont, CA: Wadsworth. You are required to get the text and an access code for Aplia. These may be bought as a bundle from the bookstore, or you may purchase them separately. A very cost effective solution is to buy an electronic version. Details of this are appended.

## **Other recommended materials:**

A student version of SPSS, version 19, can be purchased for \$15 at Clark Hall. (If you have access to another version, that will be OK.)

While not completely necessary, a calculator would be helpful. A simple one will do. The problems are generally not very computationally complex. Any calculator that calculates squares and square roots will be adequate. Programmable and graphing calculators are not permitted. Cell phones with calculators are not permitted. (If you have a question as to whether your calculator is acceptable, see the instructor. In general, if it costs less than \$20, it's probably fine. I use a Texas Instruments TI 30SLR, which costs about \$15.)

## **Classroom Protocol**

**A. Attendance:** Class attendance is not required, but is highly recommended. It will be helpful if you bring your textbook, notebook, and a calculator to class. See Aplia to find out if you are required to bring something from the text to class, such as a table we will be using. If you are absent, you are still responsible for knowing what took place in class, including any changes in the course schedule. You should find a classmate from whom you can get lecture notes and other information announced in class. Do NOT send me email asking what happened in class; find out from a classmate. Any changes in assignments, due dates or anything covered in this syllabus will be posted on Aplia. If

you are absent on a day when we do an in-class assignment, you will not be able to make it up.

**B. Arriving late:** Late arrivals are disruptive to the on-going class. Try to arrive on time. If you are delayed for some reason, try to make your entry as quiet as possible. Since announcements are often made at the start of class, being late may cause you to miss important information, for which you will still be responsible. Any announcements that reflect changes to the course schedule will also be posted on the Aplia web page. Exams are returned at the start of class. If you come in late, wait until after class to retrieve your exams. All exams must be returned to the instructor before you leave class.

**C. Electronic devices:** No electronic devices are to be used in class, other than calculators. Make sure your cell phone does not ring during class. If it does, you will be asked to leave. The use of computers is also not allowed. You may think that you can multitask, but you can't. If you have something else you need to be doing during class time, do it somewhere else. This includes texting, so don't even think about it.

**D. Talking during lectures:** Talking among students while the lecture is taking place is both rude and disruptive to me and other students. If I am speaking, you shouldn't be. If you cannot follow this rule, you will be asked to leave.

**E. Handing in assignments when I am not in my office:** hard copies of assignments should only be handed to me personally, either at class or in my office during office hours. Leaving an assignment in my office when I am not there is the same as not handing it in; you should consider it to be lost (the equivalent of the dog eating your homework).

**F. Contacting me:** The best way to contact me is to speak with me, before or after class, or during my office hours. The next best thing to do is send me email. I check my email daily and will respond to you within a day, if your email requires a response. Using the phone is not recommended; there is no guarantee that I will hear a voicemail message that is left on my office phone.

**G. Email etiquette:** email is an excellent opportunity for you to practice your writing skills. Use sentences and spell words correctly. Remember: I am your instructor, not your best buddy. Always finish with your name and section number. I ignore emails that are unsigned, since I have no other way of knowing who the author is. I ignore emails that require me to look something up, like a grade, if you do not include your section number.

### **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drops, retaking courses, etc. Information on add/drops is available at <http://info.sjsu.edu/web-dbgen/narr/soc-spring/rec-664.html>. Information about late drop is available at <http://www.sjsu.edu/aars/policies/latedrops/>. Students should be aware of the current deadlines and penalties for adding and dropping classes.

## **Assignments and Grading Policy**

### **A. Exams**

Two midterms and a final exam will be given. Exams are non-cumulative; that is, each exam begins where the last one left off. The specific chapters covered on each exam are listed in the course schedule. Each exam will be worth 100 points, though the number of questions in each exam may vary. You may use your notes during exams, but not your book (except for tables). You may also use a calculator.

### **B. Homework problems**

Homework assignments will be done using the Aplia software. Assignments and due dates will be found there. There will be an assignment for each chapter. Homework will generally be due at the start of the class following the completion of a chapter. In any case, deadlines will be clearly indicated on Aplia. Once the deadline passes, Aplia will no longer allow you to do the assignment.

### **C. Other assignments**

For simplicity, classroom analyses will be performed by hand on small amounts of data. In actual practice most analyses are based on large amounts of data and it is more efficient to use a computer. You will have three computer assignments, using a computer program called Statistical Package for the Social Sciences (SPSS). This program is available on computers in the psychology computer lab, DMH 350. Lab hours are posted on the door, but it is usually open during the day, Monday through Thursday. The student assistants in DMH 350 can provide you with assistance using the SPSS program, but not with answering assignment questions. SPSS is also available on computers in Clark Hall. There will be an additional assignment that will not involve SPSS, to be described during the semester.

The assignments' due dates are listed in the course schedule. The assignments will be posted on Aplia. Do NOT use the assignments from the computer lab; they are not for our section. Assignments are due by the start of class on the due date. An electronic version of your assignment should be submitted to Dropbox, on D2L, with an additional hardcopy to the instructor when it is due. Assignments may be handed in late, up until the end of the next class session, with a penalty of 2 points. Failure to hand in all of the assignments will result in an ***automatic failure*** in the course. (The assignments are one way we insure that the GE requirements for the course are met.) If you miss the late deadline, you must still hand in the assignment, but you will not receive any points towards your final grade for it. All assignments must be complete by the last day of class.

If you wish, you may also purchase a student version of SPSS for \$15 at Clark Hall. This is the same as the real version, but limits how much data you can analyze. It is more than adequate for class purposes.

The other assignment will involve an in-class activity. The date will be announced during the course of the semester and posted on Aplia. You must be present the day of this activity; there will be no opportunity to make it up. A write-up of the assignment will be

due two class days after the activity. An electronic copy must be submitted to Dropbox and a hard copy handed in to the instructor.

Copies of all assignments will be submitted by the instructor to turnitin.com, which will check for plagiarism. Papers found to be identical, or nearly so, will be considered to have been copied. This will result in the student receiving a failing grade in the course. There are no acceptable excuses for handing in identical papers. None.

#### **D. Unannounced quizzes**

Occasionally, there may be unannounced quizzes ('pop' quizzes). Scores on these will be counted as extra credit.

#### **E. Tentative grade determination**

Three Exams (100 points each))	300
4 other assignments (10 points each; all absolutely required)	40
Homework assignments (60 points total)	60
<b>TOTAL</b>	<b>400 points</b>

Your final grade will be determined by the total number of points you accumulate during the semester, based on the following tentative cutoff scores:

A+	> 394	C+	315-319
A	360-394	C	280-314
B+	355-359	D	240-279
B	320-354	F	< 240

Scores on exams and assignments will be posted on the Aplia web site after each exam. You should check these to make sure they agree with what you received. I will assume these are correct unless you contact me within a week of the latest grade postings.

### **University Policies**

#### **Academic integrity**

Students should understand the University's Academic Integrity Policy, available at [http://www.sa.sjsu.edu/download/judicial\\_affairs/Academic\\_Integrity\\_Policy\\_S07-2.pdf](http://www.sa.sjsu.edu/download/judicial_affairs/Academic_Integrity_Policy_S07-2.pdf). Your own commitment to learning, as evidenced by your enrollment at San Jose State University, and the University's integrity policy require 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 website for Student Conduct and Ethical Development is available at [http://www.sa.sjsu.edu/judicial\\_affairs/index.html](http://www.sa.sjsu.edu/judicial_affairs/index.html).

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 in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 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 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center) to establish a record of their disability.

### **Student Technology Resources**

Computer labs for student use are available in the Academic Success Center located on the 1<sup>st</sup> floor of Clark Hall and on the 2<sup>nd</sup> 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. Not all of these computers will have SPSS installed on them.

## Tentative Schedule for STATS 095, Sections 2 and 3

Date	Topic/Reading	Assignments
1/26	Course overview	
1/31	Chap. 1: Introduction to Statistics	
2/2	Chap. 2: Frequency Distributions	H/W 1
2/7	Chap. 3: Central Tendency	H/W 2
2/9	Chap. 4: Variability	H/W 3
2/14	Chap. 5: z-scores	H/W 4
2/16	Chap. 6: Probability	H/W 5; SPSS 1
2/21	Chap. 7 Probability and Samples	H/W 6
2/23	Review	H/W 7
2/28	First midterm exam: Chapters 1 - 7	
3/1	Review of midterm; Chap. 8: Hypothesis Testing	
3/6	In class exercise	
3/8	Chap. 8 (Continued)	
3/13	Chap.9: t statistics	H/W 8; Exercise write-up
3/15	Chap. 10: t test for independent samples	H/W 9
3/20	Chap. 11: t test for related samples	H/W 10
3/22	Chap. 12: Estimation	H/W 11; SPSS 2
3/27-3/29	Spring Break	
4/3	Review	H/W 12
4/5	Second midterm exam: Chapters 8 - 12	
4/10	Review of midterm	
4/12	Chap. 13: Intro to Analysis of Variance	
4/17	(Continued)	
4/19	Chap. 14: Two-Factor Analysis of Variance	H/W 13
4/24	Chap. 14: (Continued)	SPSS 3
4/26	Chap. 15: Correlation	H/W 14
5/1	Chap. 15: Regression	
5/3	Continued	
5/8	Chap. 16: Nonparametric tests	H/W 15
5/10	Chap. 16: (Continued)	
5/15	Review	H/W 16
5/17-5/23	Final exams	