San José State University
Department of Psychology
Statistics 115
Intermediate Statistics Section 01
Spring 2020

Course and Contact Information

Instructor: Dr. Megumi Hosoda
Office Location: DMH 315
Telephone: (408) 924-5637
Email: megumi.hosoda@sjsu.edu
Office Hours: M & W 10:45 a.m. – 11:45 a.m. or by appointment
Class Days/Time: M & W 12:00 – 1:15 p.m.
Classroom: DMH359
Prerequisites: Stat 95 (or equivalent)

Course Canvas Site and MYSJSU Messaging

The course Canvas site is an online resource supplement for this course. The site will be updated regularly throughout the semester. This site contains:

- Syllabus and tentative course schedule
- Course announcements
- Homework assignments
- Power point slides
- Course grades
- SPSS instructions

You are responsible for regularly checking with the messaging system through MySJSU and/or for checking your email and Canvas for announcements.

Course Description

Statistical analysis at the intermediate level; descriptive statistics, t-statistic, chi-square, analysis of variance, correlation and regression, and topics in experimental design; use of a statistical program, Statistical Package for Social Sciences (SPSS) 25 for Windows, for statistical analyses and interpretation. Prerequisite: Stat 95 (or equivalent)
Course Goals and Learning Outcomes

Course Learning Outcomes (CLO)

The major goal of this course is to provide you with the solid foundation in statistics, by introducing you to the various types of statistics used in psychology and other social sciences. You will understand the logic and strategies of scientific research designs and will learn how to use appropriate inferential statistics to make sense out of data. At the end of the course, you should be able to understand the “what, when, and how” of statistics. That is, you will learn what statistics are available, when to use specific statistics, and how to interpret results.

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

CLO1 - Understand the logic of statistical concepts
   - This objective is met through lectures

CLO2 - Use appropriate statistical methods to solve quantitative problems and test hypotheses
   - This objective is met through lectures and homework assignments

CLO3 - Understand the logic and strategies of scientific research designs
   - This objective is met through lectures and homework assignments

CLO4 - Run statistical analyses using SPSS and interpret statistical information presented in SPSS output
   - This objective is met through lectures and homework assignments

Required Texts

Textbook


The link below talks about the purchasing options and lists all the courses that are using Cengage at SJSU for those students who want to take advantage of Cengage Unlimited.

Other material requirements

You will need a calculator. It does not need to be a scientific one but has to have the square root button. You will also need four SCANTRON FORM NO.882-E sheets for examinations.

Stat Tutor Availability

Access Center (CL240)

phone: (408) 924-5363
email: socsci-success@sjsu.edu
Create appointment: sjsu.campus.eab.com
Peer Connections
You need to make an appointment to see a tutor through calling the office at (408) 924-2587 or online (http://peerconnections.sjsu.edu/).

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.

Course requirements include exams and homework assignments. Tentative course calendar includes exam dates, assignment due dates, and the date of a final exam.

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.”

Assignments and Grading Policy

Your letter grade for this course will be based on a total score obtained from 4 exams and 13 homework assignments (a total point might change due to a change in schedule) and will be assigned based on the following grading distribution.

Tentative

<table>
<thead>
<tr>
<th>Four examinations</th>
<th>450 pts (60%) (tentative)</th>
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<tbody>
<tr>
<td>Homework assignments</td>
<td>304.5 pts (40%) (tentative)</td>
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<tr>
<td>Total Point Possible</td>
<td>754.5 pts (tentative)</td>
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<table>
<thead>
<tr>
<th></th>
<th>A+ = 100-98%</th>
<th>A = 97-93%</th>
<th>A- = 92-90%</th>
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<tbody>
<tr>
<td>B+ = 89-88%</td>
<td>B = 87-83%</td>
<td>B- = 82-80%</td>
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<tr>
<td>C+ = 79-78%</td>
<td>C = 77-73%</td>
<td>C- = 72-70%</td>
<td></td>
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<tr>
<td>D+ = 69-68%</td>
<td>D = 67-63%</td>
<td>D- = 62-60%</td>
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<td>F = 59-0%</td>
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Examinations (450 points)(tentative)

There will be four examinations. Exams will be based on the lectures and reading. Each exam will consist of multiple-choice, short answer, and computational questions. The final exam will NOT be cumulative. Remember to bring a #2 pencil, an eraser, a calculator, and a scantron (No. 882-E) to class for each exam.
For computational questions, it is important to show all of your work and the steps you undergo to arrive at your answer in order to receive at least partial or full credit.

**Make-up policy**
A make-up exam will be given only when

- The reason is exceptional, unforeseen, and unavoidable. Examples of exceptional circumstances are health emergencies, religious obligations, death in the family, and military services. Work scheduling is not a sufficient reason for a make-up.
- You can provide written documentation.
- You notify me immediately after you become aware of the circumstances requiring a make-up exam (either prior to the exam or within 24 hours of the scheduled exam).
- When permission is granted, a make-up exam must be completed within 6 days for the originally scheduled test date at my discretion at the testing center.

**Homework Assignments (304.5 points)(tentative)**
There will be a total of 13 homework assignments. Homework assignments will require either hand calculations and/or SPSS statistical analyses (the number of homework assignment might change due to a change in schedule). Some assignments will require producing a brief result section in APA style and/or graphing. The due dates are listed at the end of the syllabus.

A late homework assignment will be accepted with a penalty (30% reduction of the total possible points). This means that even if you answer all of the questions correctly, your score can never be higher than 30% of the total possible points. Consequently, handing in a late homework assignment will only hurt your grade in the end. Thus, I encourage you to turn each homework assignment in on the scheduled due date.

Note that any homework assignments sent via email will not be accepted.

**Extra Credit**
There will be three bonus homework assignments and bonus questions in some exams.
**Tips to help you succeed in Stat115**

1. Attend all classes, arrive on time, and take good notes. The material in the course is cumulative and it becomes more complex as the semester progresses. If you miss several lectures, it will become extremely difficult for you to catch up with class. Thus, it is very crucial that you attend all of the class periods.

2. **Always bring your calculator to class because we spend a great amount of class time calculating.**

3. Form a study group with fellow students.

4. Read assigned readings before each class; read each chapter at least twice.

5. Ask questions in class and during office hours. I am available to help anyone having difficulty in the class. I am your resource person.

6. Make flashcards for important concepts and terms.

7. Visit Peer Connections (SSC, Room 600) and/or Access Center (CL240) if you need tutoring.

8. Complete assignments as soon as the relevant information is presented in class.

**Classroom Protocol**

In an effort to create a classroom environment conducive to learning, I expect you to follow the guidelines below to help the class go smoothly and to limit the amount of distractions that occur.

1. Arrive for class on time. If you arrive late, please enter the class and take a seat as quietly as you can. This will minimize disturbance of the lecture and the concentration of your fellow classmates. Do not come in late and enter into a conversation to catch up on information you missed or expect information you missed to be repeated.

2. If you have to leave early, please do so quietly and sit next to the door so that you do not distract other students.

3. Do not carry on conversations with others during class.

4. No cell/smart phone use for text messaging, emailing, or talking during any class!

5. Turn off all smart phones and any other devices that produce distraction before class.

6. Remove all earphones and do not listen to music or look at your instagram, facebook, twitter, etc during class time.

**Use of Laptops in the Classroom**

Laptops are permitted in the classroom for **NOTE-TAKING PURPOSES ONLY**. Use of laptops for any other purpose (e.g., non-class related activities like emailing friends, or surfing the web) will not be permitted. Students not abiding by these guidelines will be asked to turn off their laptop and will not be allowed to bring it into the classroom in the future.
University Policies

The Office of Graduate and Undergraduate Programs maintains university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc.” You may find all syllabus related University Policies and resources information listed on GUP’s Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

Academic integrity

The University Academic Integrity Policy F15-7 requires you to be honest in your academic course work. All infractions need to be reported to the office of Student Conduct and Ethical Development.

For this class, all the assignments are to be completed by the individual student unless otherwise specified. If you are caught cheating on an exam, you will get a score of zero for the exam and such behavior will be reported to the university.

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. This 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.”

If you would like to record course lectures, please obtain permission for your instructor in writing (via email is ok) or orally and indicate whether you will record for the whole semester or on a class by class basis.

“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 Accessible Education Center (AEC) at http://www.sjsu.edu/aec 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. Computers are also available in the Martin Luther King Library. SPSS will be available in the computer labs and on laptops in the Martin Luther King Library.

Below is the link to access SPSS. In order to access it, students will need to be logged into their SJSU Gmail Accounts:

http://www.sjsu.edu/ecampus/research-tools/spss/index.html
Then click ITS SPSS Software Webpage. Scroll down to find SPSS Statistical Software from IBM. Then select either SPSS25 or SPSS26.

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.

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 Counseling Services

The SJSU Counseling Services is located on the corner of 7th Street and San Carlos Street, in Room 300B, Student Wellness Center. 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.
**Stat115 Intermediate Statistics Spring 2020**

**Course Schedule**

This course will follow the syllabus to the extent possible. However, the timing and specific nature of topics may change. Any changes will be announced in class as far in advance as possible. You are responsible for keeping informed of any changes made to the class schedule.

<table>
<thead>
<tr>
<th>Date</th>
<th>Class Topic</th>
<th>Reading</th>
<th>Assignment due</th>
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</table>
| 1/27 (Mon), 1/29 (Wed), 2/3 (Mon), & 2/5 (Wed) | About this course  
Review of statistical concepts  
Descriptive statistics          | Chs. 1 – 4 | 2/3 – HW1       |
| 2/10 (Mon) & 2/12 (Wed)  | SPSS  
z-score  
Normal distribution             | Chs. 5 & 6 | 2/10 – HW2  
2/12 - HW3                |
| 2/17 (Mon) & 2/19 (Wed)  | Sampling distribution                                                       | Ch. 7    | 2/19 – HW4       |
| 2/24 (Mon)               | Exam 1 (Chs 1 – 7)  
Last day to turn HWs1-4 in without a penalty                                 |          | 2/24 – HW5       |
t-test with one sample  
Independent sample t-test          | Chs. 8, 9, 10 | 3/4 – HW6  
3/11- HW7                |
| 3/16 (Mon)               | Exam 2 (Chs. 8 - 10)  
Last day to turn HWs 6-7 in without a penalty                                |          | 3/16 – HW8  
Bonus 1                  |
| 3/18 (Wed) & 3/23 (Mon)  | Repeated measures t-test  
Last day to turn HW8 in without a penalty (3/18)                          | Ch 11    |                 |
| 3/30 (Mon) & 4/1 (Wed)   | No Class  
Spring Recess                                                            |          |                 |
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<th>Date</th>
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| 4/6 (Mon)       | Correlation and Regression  
Last day to turn HW9 in without a penalty (4/6) | Chs. 15 – 16  |                                       |
| 4/8 (Wed)       | Exam 3 (Chs. 11, 15, & 16)                                                 |               | 4/8 – HW10  
Bonus question 2                   |
| 4/13 (Mon) & 4/15 (Wed) | Chi Square  
Last day to turn HW10 in without a penalty (4/15) | Ch. 17        |                                       |
| 4/20 (Mon), 4/22 (Wed), & 4/27 (Mon) | One-way ANOVA                  | Ch. 12        | 4/22 – HW11                          |
| 5/19 (Tue)      | Final Exam (Chs. 18, 12 & 14)  
9:45–12:00 p.m.                  |               | 5/19 – HW13  
Bonus question 3                  |
| 5/20 (Wed)      | Last day to turn HWs 11, 12 & 13 by 12:00p.m.  
Any HWs turning into after 12:00p.m. will not be accepted. |               |                                       |