San José State University  
Department of Psychology

Statistics 115  
Intermediate Statistics Section 02  
Spring 2011

Instructor: Dr. Megumi Hosoda  
Office Location: DMH Room 315  
Telephone: (408) 924-5637  
Email: Megumi.Hosoda@sjsu.edu  
Office Hours: Mon & Wed 11:00 – 12:00 pm and 3:00-4:00p.m. or by appointment  
Class Days/Time: M W 1:30 – 2:45 pm  
Classroom: CL226  
Prerequisites: Elementary Statistics (Stat 95)

Course Webpage
The syllabus will be posted at http://www.sjsu.edu/psych/Syllabus/Stat_115/. Copies of the course materials such as the syllabus, major assignments, handouts, etc. will be found on my faculty web page accessible through the Faculty Web Page links on the SJSU home page. Please visit http://www.sjsu.edu/faculty_and_staff/course_detail.jsp?id=5601.

Course Description
This course is designed to familiarize students with the types of statistics that researchers use when they analyze their data. Students will examine the logic and strategies of scientific research designs and will learn how to use appropriate inferential statistics to make sense out of data. Students will also learn how a statistical program, Statistical Package for Social Sciences (SPSS) 16.0 for Windows (or PASW), is used to run statistical analyses on the computer and interpret outputs.

Course Goals and Student Learning Objectives
The major goal of this course is to provide students with the solid foundation in statistics, by introducing them to the various types of statistics used in psychology and other social sciences. At the end of the course, students should be able to understand the “what, when,
and how” of statistics. That is, students will learn what statistics are available, when to use specific statistics, and how to interpret results.

**Required Texts/Readings**

**Textbook**

**Other material requirements**
You will need a flash drive for your data files and SPSS outputs and a calculator. You do not need a scientific calculator. You will also need four SCANTRON FORM NO.882-E sheets for examinations.

**Classroom Protocol**
In an effort to create a classroom environment conducive to learning, I expect you to follow the following classroom etiquette:

1. Be polite and respectful to other people in the class.
2. Do not talk when your instructor is speaking or when other students are asking questions.
3. Please turn off all cell phones, pagers, and any other devices that produce distraction prior to entering the classroom.
4. Do not work on any other course material during class, including studying for other exams.
5. If you must arrive late or leave early, please do so quietly and with a minimum of distraction.
6. For those of you who bring laptops to class, surfing the internet during the class period is strictly prohibited. If I find you surfing the internet during the class period, you might be asked to leave the class.

**Dropping and Adding**
Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Information on add/drops are available at [http://info.sjsu.edu/web-dbgen/narr/soc-fall/rec-298.html](http://info.sjsu.edu/web-dbgen/narr/soc-fall/rec-298.html). Information about late drop is available at [http://www.sjsu.edu/sac/advising/latedrops/policy/](http://www.sjsu.edu/sac/advising/latedrops/policy/). Students should be aware of the current deadlines and penalties for adding and dropping classes.

**Assignments and Grading Policy**
Your letter grade for this course will be based on a total score obtained from exams and homework assignments (a total point might change due to a change in schedule) and will be assigned based on the following grading distribution.
Three midterm examinations  253 pts (39%)
Final Exam   165 pts (25%)
Homework assignments  234 pts (36%)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Score</th>
<th>Maximum Score</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>&gt; 639</td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td>A</td>
<td>607 – 638</td>
<td>93%</td>
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</tr>
<tr>
<td>A-</td>
<td>587 – 606</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>574 – 586</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>542 – 573</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>522 – 541</td>
<td>80%</td>
<td></td>
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<tr>
<td>C+</td>
<td>509 – 521</td>
<td>78%</td>
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<tr>
<td>C</td>
<td>476 – 508</td>
<td>73%</td>
<td></td>
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<tr>
<td>C-</td>
<td>457 – 475</td>
<td>70%</td>
<td></td>
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<tr>
<td>D+</td>
<td>444 – 456</td>
<td>68%</td>
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<tr>
<td>D</td>
<td>411 – 443</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>D-</td>
<td>392 – 410</td>
<td>60%</td>
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<tr>
<td>F</td>
<td>&lt; 391</td>
<td>&lt; 60%</td>
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Total Point Possible 652

Examinations (418 points)
There will be four examinations – three midterms and a final. Exams will be based on the lectures and reading. The exams will consist of multiple-choice items and calculations. The final exam will be cumulative. Remember to bring a #2 pencil, an eraser, a calculator, and a scantron (No. 882-E) to class for each exam.

In order for the evaluation process to be fair to every student in the course, it is important to make sure that the conditions of evaluation are as uniform as possible for everyone. This kind of uniformity simply cannot be achieved if some students take the exams on days other than those when the exam is given to the rest of the class. Just the fact that some students would have more time to study for the exam than do those students who take the exam as scheduled is simply unfair.

Therefore, in the interest of maximizing uniformity for evaluation conditions, in fairness to all students in the class who take their exams as scheduled, the following policy will be implemented without exception (i.e., is non-negotiable).

Make-up exams (without a penalty) will be given only under the most extraordinary circumstances, upon approval by your instructor of a typewritten petition with convincingly official supporting documentation attached (e.g., letter from a medical doctor testifying that the student was incapable of attending class to take the exam).

Without your instructor’s approval of a petition as described above, makeup exams will be given with a substantial penalty (30% reduction of the possible highest score). This means that even if you answer all of the questions correctly on the exam, your score can never be higher than 70% of the total possible points (i.e., the highest score you would receive is a C-).

Homework Assignments (234 points)
There will be a total of eleven 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 in the syllabus.

A late homework assignment will be accepted with a substantial penalty (20% 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 20% of the total possible points (i.e., the highest score you would receive is a B-). Obviously, handing in a late homework assignment will hurt your grade in the end. Thus, I encourage you to turn each homework assignment in on the scheduled due date or the scheduled exam date.

At my discretion, you could be asked to redo a homework assignment. However, keep in mind that this really occurs. Again, the highest possible score on the redone assignment will be 90% of the total possible points (10% reduction of the total possible points).

Any homework assignments sent via email will not be accepted.

**University Policies**

**Academic integrity**

Students should know that the University’s [Academic Integrity Policy is 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 1st floor of the Clark Hall and on the 2nd floor of the Student Union. Additional computer
labs are available in your department (DMH350). Computers are also available in the Martin Luther King Library. SPSS will be available in the computer labs, the Psychology statistics lab (DMH350), and on laptops in the Martin Luther King Library. A student version of SPSS could be purchased at Help Desk in the Clark Hall.

**Learning Assistance Resource Center**

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The LARC website is located at [http://www.sjsu.edu/larc/](http://www.sjsu.edu/larc/).
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>
| 1/26 (Wed), 1/31 (Mon) & 2/2 (Wed) | About this course  
Review of statistical concepts  
Descriptive statistics | Chs. 1 – 4    |                          |
| 2/7 (Mon), 2/9 (Wed) & 2/14 (Mon) | Introduction to SPSS  
Normal distribution  
Probability  
Sampling distribution | Chs. 5 – 7    | 2/9 – HW 1  
2/14 – HW2               |
| 2/16 (Wed), 2/21 (Mon) & 2/23(Wed) | Hypothesis testing  
Power | Ch. 8          | 2/16 – HW 3               |
| 2/28 (Mon)            | Review of t-tests  
t-test with one sample  
Independent samples  
Repeated measures | Chs. 9-12      | 2/28 – HW 4               |
| 3/2 (Wed)             | **Exam 1 (Chs. 1 – 8)**  
Last due date for the late HW 1-4 without a penalty |               |                          |
| 3/7 (Mon), 3/9 (Wed), 3/14 (Mon) & 3/16 (Wed) | Review of t-tests  
t-test with one sample  
Independent samples  
Repeated measures | Chs. 9-12      | 3/9 – HW 5  
3/16 – HW 6               |
| 3/21 (Mon)            | **Exam 2 (Chs. 9 – 12)**  
Last due date for the late HW 5 & 6 without a penalty |               | 3/21 -- HW 7               |
| 3/23 (Wed)            | Correlation and Regression  
Multiple regression | Chs. 16 & 17  |                          |
| 3/28(Mon) & 3/30(Wed)  | **Spring recess – No class** |               |                          |
| 4/4 (Mon) & 4/6 (Wed) | Correlation and Regression  
Multiple regression | Chs. 16 & 17  |                          |
<table>
<thead>
<tr>
<th>Date</th>
<th>Class Topic</th>
<th>Reading</th>
<th>Assignment due</th>
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<tbody>
<tr>
<td>4/11 (Mon) &amp; 4/13 (Wed)</td>
<td>Chi Square</td>
<td>Ch. 18</td>
<td>4/11 – HW 8</td>
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<tr>
<td>4/18 (Mon)</td>
<td>One-way ANOVA</td>
<td>Ch. 13</td>
<td>4/18 – HW9</td>
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<tr>
<td>4/20 (Wed)</td>
<td>Exam 3 (Chs. 16, 17, &amp; 18)</td>
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<td>Last due date for the late HW 8 &amp; 9 without penalty</td>
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<tr>
<td>4/25 (Mon), 4/27 (Wed) &amp; 5/2 (Mon)</td>
<td>One-way ANOVA</td>
<td>Ch. 13</td>
<td></td>
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<tr>
<td>5/19 (Thu) 12:15 – 2:30</td>
<td>Final Exam (cumulative)</td>
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<td>Last due dates for the late HW 10 &amp; 11</td>
<td></td>
<td>Return all the exams back to class</td>
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Student Information Sheet
Intermediate Statistics – Spring 2011

1. Your Name (Please print)

2. Best way to contact you if necessary (e.g., e-mail address)

3. Major(s)/ and Minor

4. Year in school (Freshman, Sophomore, Junior, Senior, Graduate student)

5. Why are you taking this class?

6. Have you ever used SPSS (or PASW)?

7. Would you describe yourself as math phobic? (Explain)

8. Where and when did you take an elementary statistics course? How did you do in the course?

9. Are you planning to pursue a graduate degree? A master degree or a doctoral degree? In what area (be specific if possible)?

10. Any information you would like me to know about you?