Instructor: Professor Laree A. Huntsman, Ph.D.

Office Location: DMH 313

Telephone: 408-924-5633

Email: laree.huntsman@sjsu.edu

Office Hours: Monday and Wednesday 3:00-4:00

Class Days/Time: Monday and Wednesday 10:30-11:45

Classroom: WSQ 207

SPSS Computer Lab: DMH 350

Prerequisites: Entry Level Mathematics (ELM) Test and Intermediate College Algebra.

GE/SJSU Studies Category: Area B4

Course Description

This course is designed to provide an overview of elementary statistical procedures used by researchers in the behavioral and social sciences and to prepare students for more advanced statistical techniques presented in other courses. Topics include organization and classification of data, graphic representation, measures of central tendency and variability, percentiles, normal curve, standard scores, correlation and regression, statistical inference and, use of microcomputers for statistical calculations.

Student Learning Objectives Assesment and Outcomes

The proficiency goals for this General Education course are: (a) the ability to solve mathematical problems, including those presented in verbal form, (b) the ability to arrive at descriptive and inferential conclusions on the basis of mathematical quantitative and qualitative data presented through such forms as statistics, tables, graphs, averages, and computer outputs, and (c) an understanding of the ways in which mathematics affects human activities. Measured assessments of these learning objectives will include in class and homework problem problem sets, completing computerized assignments, written work, and
specific exam items. The 500 word writing requirement for this class is satisfied through essay questions on the three exams and the written portion of the SPSS computerized assignment.

**Required Texts/Readings**

**Textbook** (available at campus bookstore)


**Other Equipment/Material Requirements**

Calculator. Having the proper tool to do the job saves time and reduces stress. Any four function calculator that also gives you the square root of a number can get you through the course. However, having a calculator with statistical capabilities that will automatically compute the mean, standard deviation, correlation, slope, and intercept will save you time in checking your work. Since we spend an extensive amount of class time performing calculations, you are required to bring your calculator to every class.

Two T & E 200 Scantron Forms along with two sharpened Number 2 pencils.

**Definition of a Credit Hour**

Success in this 3-credit course is based on the expectation that students will spend 6 hours per week on activities outside of the regular class time (e.g., studying notes, completing problem sets, skill practice, textbook reading, and computer assignments).

**Electronic Policy**

Do not use laptops or any electronic devices in class (only calculators)
Turn off and put away all electronic devices in class (only calculators).
Do not send or receive text messages or phone calls during class.
Do not look at, hold, touch, or even think about your phone in class.
Do not make audio or video recordings in class
Do not take pictures in class
Unless you have a documented medical excuse, there are no laptops in class.
Unless you have a documented medical excuse do not record the lectures.
If you have a documented medical excuse, you must provide it in writing, and you must register with me to send me all of the recordings and notes once a week.
Classroom Protocol

Come to class with a positive attitude.
Be respectful to your instructor and to your peers.
Come to class everyday.
Be punctual - late students are to enter the room discreetly and sit in the back.
Do not leave early (if you must leave early sit near the door and leave discreetly).
Unless you have an emergency there are no in and out privileges.
Be prepared and have necessary materials with you.
Do assigned homework and readings on time.
Refrain from interrupting.
Raise your hand if you wish to ask a question or make a comment.
Do talk/joke and carry on conversations with your peers before lecture.
Do not talk/joke or carry on conversations with your peers during lecture.
Cover your mouth when you yawn, burp, cough, or sneeze.
Do not read the newspaper during lecture.
Refrain from obviously looking at the clock or your watch.
Refrain from eating, drinking (water is fine) or chewing gum.
Refrain from wearing perfume, colognes, and/or scented deodorants.
Do not ask, "When do we get our exam/SPSS scores?" (Return dates listed)
Do not ask, "I wasn't in class today, did I miss anything important?"
Do not ask, "May I have a copy of your notes and overheads?"
Do not say, "I was late to class today so I probably missed this but..."
Do not sleep during class.
When you come to see me after class knock on my door then poke your head in.
When you talk to me after class put away all electronic devices.

Dropping and Adding

Students are responsible for understanding the policies, procedures, current deadlines, and penalties about add/drop, late drop, grade forgiveness, incompletes, etc. Refer to the current semester’s catalog policies section for specific registration information. This semester, the last day to drop or withdraw without a "W" grade is Tuesday February 4.

Assignments and Grading Policy

EXAMS (300 points):

There will be three 100-point exams. The three exams have 40 questions worth 2.5 points each (40 x 2.5 = 100 points) Each exam has two parts. Part A is an open note/book/calculator/brain exam consisting of 20 questions. Part B (closed notes/book etc.) consists of 20 true/false, matching, and fill in the blank type questions (two T & E 200 scantron forms required). Part A and Part B will be administered over two consecutive testing sessions for Exams 1 and 2. Part A and Part B of Exam 3 will be administered during the university final examination scheduled time period.
MISSED EXAM:

You must make every effort to take the exam on the scheduled day because THERE ARE NO MAKE-UP EXAMS given in this course. If you miss an exam or elect not to take an exam for any reason, then you will receive the score of zero for that exam.

PROBLEM SETS:

You will be given a homework assignment from your Huntsman Stat Workbook for every topic covered in class. Since problem sets are not collected or graded you must rely on your own motivation to complete them. Preparation for each class meeting is the secret of success in this course. It is important for you to practice each skill until you feel competent; and then move on to the next idea. Since exams are based primarily on similar problem sets, completing each assignment is essential if you want to do well in the course. The problem sets will be reviewed in class.

MISSED LECTURE:

Although attendance is not taken, perfect attendance is critical for success in this class, therefore you should never be absent and you should never be late. However, if you are absent, refer to your classmates for lecture notes. Please also be aware that I do NOT put any lecture material on the web, nor do I email them to students, nor do I give private lectures or allow students to copy my notes after class or during office hours. The only sure way for you to get lecture notes is to attend the lectures and take your own notes.

SPSS COMPUTER ASSIGNMENTS (100 points):

For simplicity, most of our 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. The statistical program we will be using is called SPSS. You will be required to complete four SPSS assignments (4 at 25 points each = 100 points). Late assignments will have points deducted (3 points per day). Since SPSS assignments will be graded on a credit/no credit basis, students receiving "no credit" will be given the opportunity to resubmit their SPSS assignments. Instances of academic dishonesty will not be tolerated. Copied or plagiarized assignments will result in a score of zero. All SPSS assignments are to be completed by the individual student.
HOW TO EVALUATE YOUR PERFORMANCE ON AN EXAM OR SPSS ASSIGNMENTS:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 - 100</td>
</tr>
<tr>
<td>A-</td>
<td>90 - 92</td>
</tr>
<tr>
<td>B+</td>
<td>87 - 89</td>
</tr>
<tr>
<td>B</td>
<td>84 - 86</td>
</tr>
<tr>
<td>B-</td>
<td>80 - 83</td>
</tr>
<tr>
<td>C+</td>
<td>77 - 79</td>
</tr>
<tr>
<td>C</td>
<td>74 - 76</td>
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<tr>
<td>C-</td>
<td>70 - 73</td>
</tr>
<tr>
<td>D+</td>
<td>67 - 69</td>
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<tr>
<td>D</td>
<td>64 - 66</td>
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<td>D-</td>
<td>60 - 63</td>
</tr>
<tr>
<td>F</td>
<td>0 - 59</td>
</tr>
</tbody>
</table>

COURSE GRADE: The course grade for this 400 point class = three exams (100 points each = 300) and four SPSS computer assignments (25 points each = 100).

HOW WILL YOUR COURSE GRADE BE DETERMINED?

Your final grade is determined by the total of all the points you have received. Grades are NOT curved. For example, if you get a score of 88% (B+), you earn 88 points for that exam. Because grades are never curved, it is easy to keep track of how well you are doing in the course. A form for this purpose is provided below. In order to be fair to the entire class, I do not assign extra credit to raise grades.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>372 - 400 (93+%)</td>
</tr>
<tr>
<td>A-</td>
<td>360 - 371 (90+%)</td>
</tr>
<tr>
<td>B+</td>
<td>348 - 359 (87+%)</td>
</tr>
<tr>
<td>B</td>
<td>336 - 347 (84+%)</td>
</tr>
<tr>
<td>B-</td>
<td>320 - 335 (80+%)</td>
</tr>
<tr>
<td>C+</td>
<td>308 - 319 (77+%)</td>
</tr>
<tr>
<td>C</td>
<td>296 - 307 (74+%)</td>
</tr>
<tr>
<td>C-</td>
<td>280 - 295 (70+%)</td>
</tr>
<tr>
<td>D+</td>
<td>268 - 279 (67+%)</td>
</tr>
<tr>
<td>D</td>
<td>256 - 267 (64+%)</td>
</tr>
<tr>
<td>D-</td>
<td>240 - 255 (60+%)</td>
</tr>
<tr>
<td>F</td>
<td>239 (-60%)</td>
</tr>
</tbody>
</table>

PERSONAL GRADE RECORD:

Be sure to keep a written record of your progress in this course.

- EXAM 1 _______ (100)
- EXAM 2 _______ (100)
- EXAM 3 _______ (100)
- SPSS _______ (100)

COURSE TOTAL _______ (400)
University Policies

Academic Integrity

The exchange of any information during an exam is forbidden. Students may not share calculators nor may they use a cell phone as a substitute for a calculator. Do not ever look at another student’s exam during a test. Additionally, you must not allow other students to look at your exam. Failure to adhere to these rules will result in a score of zero being recorded for any students who are in violation of this rule. According to the University's Academic Integrity Policy you are required to be honest in all of your coursework. Furthermore, faculty are required to report all infractions to the Office of Student Conduct and Ethical Development.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations, accommodations, or special arrangements because of a disability, please let me know as soon as possible. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Disability Resource Center (http://www.drc.sjsu.edu). Additionally, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please let me know as soon as possible.

Unless you have a documented medical excuse that you are willing to provide me, electronic devices (laptops, recording devices, cellular telephones, etc.) are NOT allowed to be operated during class. The only exception to this rule is a calculator.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>Topic</th>
<th>Dates</th>
</tr>
</thead>
</table>
| WEEK 1 | Course orientation  
Introduction to statistics  
Types of data  
Tables     | 1/27, 1/29  |
| WEEK 2 | Graphs  
Averages  
Variability         | 2/3, 2/5    |
|         | Standard Scores  
Distributions          |             |
| WEEK 3 | Correlation       | 2/10, 2/12  |
| WEEK 4 | Prediction        | 2/17, 2/19  |
| WEEK 6 | *** EXAM 1 PART A *** Monday, 2/24  
*** EXAM 1 PART B *** Wednesday, 2/26  
SPSS packet distributed, 2/26  
2/24, 2/26 |             |
| WEEK 7 | Hypothesis Testing  
Directionality  
Four Possible Outcomes |            |
|         | EXAM 1 SCORES RETURNED, Wednesday, 3/5  
3/3, 3/5  |             |
| WEEK 8 | $t$-test for one sample  
$t$-test for correlation | 3/10, 3/12  |
| WEEK 9 | $t$-tests  
SPSS Day, 3/19  
3/17, 3/19   |             |
| WEEK 10| *** SPRING BREAK *** | 3/24, 3/26  |
WEEK 11
*** CESAR CHAVEZ DAY HOLIDAY *** 3/31
One Way Chi Square, 4/2
3/31, 4/2

WEEK 12
Two Way Chi Square
Probabilities
4/7, 4/9

WEEK 13
*** EXAM 2 PART A *** Monday, 4/14
*** EXAM 2 PART B *** Wednesday, 4/16
4/14, 4/16

WEEK 14
Independent $t$-test
Dependent $t$–test
Confidence intervals
*** SPSS 1-4 DUE *** Wednesday, 4/23
EXAM 2 SCORES RETURNED, Wednesday, 4/23
4/21, 4/23

WEEK 15
$t$-tests
Analysis of Variance (One Factor)
SPSS 1-4 SCORES RETURNED Monday, 4/28
4/28, 4/30

WEEK 16
Analysis of Variance (Two Factor)
*** SPSS REDO DUE *** Monday, 5/5
5/5, 5/7

WEEK 17
ANOVA (last class), 5/12
Study Conference Day (Dead Day/No Class), 5/14
*** FINAL EXAM 3 *** Thursday, 5/15, 9:45 - 12:00