San José State University  
Social Sciences/Sociology  
SOCI 102, Introduction to Statistics, 25397, Spring, 2016

Course and Contact Information

Instructor: Jose Bautista  
Office Location: DMH 216  
Telephone: (408) (741-2492)  
Email: jose.bautista@sjsu.edu  
Office Hours: Monday 5:00 – 6:00 PM  
Class Days/Time: Monday 6:00 – 8:45 PM  
Classroom: DMH 227  
Prerequisites: SOCI 1 (or equivalent)

Course Format

Although this is not an online course, there are a lot of materials available on my web site (www.imadhatter.com). In addition, weekly quizzes will also be posted online. If you do not have access to the internet let me know, and I will provide you with the materials.

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on my faculty web page at http://www.imadhatter.com. You are responsible for regularly checking the web site to learn of any updates.

Course Description

Introduction to measures of central tendency, variation, correlation and regression, probability, estimation and hypothesis testing.

Learning Outcomes

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

1. Understand the different measurement scales, their uses and limitations.
2. Describe and interpret data through tables and graphs
3. Understand the meaning an usage of descriptive statistics including Mean, Median, Mode, Standard Deviation and Variance
4. Select the appropriate techniques to use given a particular set of data or research question.
5. Critically evaluate statistical results in the media, professional literature, and other areas of your life.
Course Learning Outcomes (CLO)

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

1. Describe data through tables and graphs
2. Calculate descriptive statistics including Proportion, Percentage, Mean, Median, Mode, Standard Deviation and Variance
3. Calculate inferential statistics including z-test, t-test, chi-square, correlation, and One-way ANOVA

Required Texts/Readings

Textbook

ESSENTIALS OF SOCIAL STATISTICS FOR A DIVERSE SOCIETY
Author: LEON-GUERRERO
ISBN: 9781483359496
Edition/Copyright: 2nd / 2015
Publisher: SAGE

Other equipment / material requirements

Calculator (should be able to do square roots, and you should be comfortable using it). Calculators on cell phones, smart phones, tablets or computers are not allowed.
Scantron (882) forms

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: Three exams. Lowest score is dropped. As a general rule, the examinations will take place during the last 2 hours of the class period in which they are scheduled. Each exam is worth 100 points.

Exam 1 (Chapters 1-4): 100 points
The Research Process
Measurement Scales
Frequency Distributions
Proportions and Percentages,
Cumulative Distributions
Rates
Pie Charts
Bar Graphs
Histograms
Line Graphs
The Mode
The Median
The Mean
The Shape of the Distributions
The Range
The Interquartile Range
Variance
Standard Deviation

Exam 2 (Chapters 5, 6 & 8): 100 points
The Normal Distribution
Standard (Z) Scores
The Standard Normal Distribution
The Standard Normal Table
Transforming Proportions (or Percentages) Into Z Scores
The Concept of the Sampling Distribution
The Sampling Distribution of the Mean
The Central Limit Theorem
Assumptions of Statistical Hypothesis Testing
Stating the Research and Null Hypotheses
Probability Values and Alpha
Hypothesis Testing
Errors in Hypothesis Testing
Z-tests

Exam 3 (Chapters 8-9): 100 points
T-test for one sample
T-test for independent samples
T-test for dependent samples
Bivariate Tables
Chi-Square

Quizzes: Eleven quizzes. Lowest score is dropped. These will be online, and you will have a week to do each of them. Each quiz is worth 20 points.

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Chapter</th>
<th>Available at midnight on</th>
<th>Due by midnight on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1</td>
<td>Chapter 1</td>
<td>2/1/2016</td>
<td>2/7/2016</td>
</tr>
<tr>
<td>Quiz 2</td>
<td>Chapter 2</td>
<td>2/8/2016</td>
<td>2/14/2016</td>
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<tr>
<td>Quiz 3</td>
<td>Chapter 3</td>
<td>2/15/2016</td>
<td>2/21/2016</td>
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<td>Quiz 4</td>
<td>Chapter 4</td>
<td>2/22/2016</td>
<td>2/28/2016</td>
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<td>Quiz 6</td>
<td>Chapter 6</td>
<td>3/7/2016</td>
<td>3/13/2016</td>
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<tr>
<td>Quiz 7</td>
<td>Chapter 8 (z-tests)</td>
<td>3/14/2016</td>
<td>3/20/2016</td>
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<td>Quiz 8</td>
<td>Chapter 8 (t-tests)</td>
<td>3/21/2016</td>
<td>3/27/2016</td>
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<tr>
<td>Quiz 11</td>
<td>Chapter 11</td>
<td>4/18/2016</td>
<td>4/24/2016</td>
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</table>

Final Exam: About 50% comprehensive, and worth twice as much as the midterms. You will have the complete Final Examination period available to complete the final exam. Final exam is worth 200 points.

Final Exam (Chapters 10-11): 200 points
Topics covered in exams 1-3
One-way Analysis of Variance
Regression
Correlation
The Scatter Diagram
Linear Relationships and Prediction Rules

Grading Policy

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3 Exams 100 pts/ea.</td>
<td>300</td>
<td>(33%)</td>
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<tr>
<td>Lowest Exam score</td>
<td>-100</td>
<td></td>
</tr>
<tr>
<td>11 Quizzes 20 pts./ea.</td>
<td>220</td>
<td>(33%)</td>
</tr>
<tr>
<td>Lowest Quiz score</td>
<td>-20</td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
<td>(33%)</td>
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<tr>
<td>TOTAL</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

90% (540 points) or above gets an A  
80% (480 points) or above gets an B  
70% (420 points) or above gets an C  
60% (360 points) or above gets an D  
< 60% (< 540 points) gets an F

Plus or minus (+/-) grades may be given at instructor’s discretion for borderline grades.

Extra credit opportunities are usually available as a part of the regular midterm exams.

Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See [University Policy F13-1](http://www.sjsu.edu/senate/docs/F13-1.pdf) for more details.

Classroom Protocol

I am committed to your success in this course, but it is your responsibility to keep up with the readings and assignments, to ask questions in class or during office hours if you don’t understand the material, and to come to class fully prepared.

University Policies

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU’s policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. To learn important campus information, view University Policy S90–5 at [http://www.sjsu.edu/senate/docs/S90-5.pdf](http://www.sjsu.edu/senate/docs/S90-5.pdf) and SJSU current semester’s Policies and Procedures, at [http://info.sjsu.edu/static/catalog/policies.html](http://info.sjsu.edu/static/catalog/policies.html). In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not address the issue, it is recommended that the student contact the Department Chair as the next step.

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](http://info.sjsu.edu/static/catalog/policies.html) section at [http://info.sjsu.edu/static/catalog/policies.html](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 and the following items to be included in the syllabus:

- “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/.

**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.

**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.
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 Counseling Services**

The SJSU Counseling and Psychological Services is located on the corner of 7th Street and San Carlos in the new Student Wellness Center, Room 300B. Professional psychologists, social workers, and counselors are available to provide confidential 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 and Psychological Services website at http://www.sjsu.edu/counseling.
SOCI 102 / Introduction to Statistics, Spring, 2016, Course Schedule

Below is a rough schedule. For the official up-to-date course calendar check our website at [www.imadhatter.com](http://www.imadhatter.com). The calendar is subject to change, so check often. Changes will be noted on the “What’s New” section of our home page.

**Course Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2/1/2016</td>
<td>CHAPTER 1: The What and the Why of Statistics (Quiz 1)</td>
</tr>
<tr>
<td>2</td>
<td>2/8/2016</td>
<td>CHAPTER 2: The Organization and Graphic Presentation of Data (Quiz 2)</td>
</tr>
<tr>
<td>3</td>
<td>2/15/2016</td>
<td>CHAPTER 3: Measures of Central Tendency (Quiz 3)</td>
</tr>
<tr>
<td>4</td>
<td>2/22/2016</td>
<td>CHAPTER 4: Measures of Variability (Quiz 4)</td>
</tr>
<tr>
<td>5</td>
<td>2/29/2016</td>
<td>Exam 1</td>
</tr>
<tr>
<td>6</td>
<td>3/7/2016</td>
<td>CHAPTER 5: The Normal Distribution (Quiz 5)</td>
</tr>
<tr>
<td>7</td>
<td>3/14/2016</td>
<td>CHAPTER 6: Sampling and Sampling Distributions (Quiz 6)</td>
</tr>
<tr>
<td>8</td>
<td>3/21/2016</td>
<td>CHAPTER 8: Testing Hypotheses (Quiz 7)</td>
</tr>
<tr>
<td>9</td>
<td>3/28/2016</td>
<td>Spring Break</td>
</tr>
<tr>
<td>10</td>
<td>4/4/2016</td>
<td>Exam 2</td>
</tr>
<tr>
<td>11</td>
<td>4/11/2016</td>
<td>CHAPTER 8: Testing Hypotheses (Quiz 8)</td>
</tr>
<tr>
<td>12</td>
<td>4/18/2016</td>
<td>CHAPTER 9: Bivariate Tables (Quiz 9)</td>
</tr>
<tr>
<td>13</td>
<td>4/25/2016</td>
<td>CHAPTER 10: Analysis of Variance</td>
</tr>
<tr>
<td>14</td>
<td>5/2/2016</td>
<td>Exam 3</td>
</tr>
<tr>
<td>15</td>
<td>5/9/2016</td>
<td>CHAPTER 10: Analysis of Variance (Quiz 10)</td>
</tr>
<tr>
<td>16</td>
<td>5/16/2016</td>
<td>CHAPTER 11: Regression and Correlation (Quiz 11)</td>
</tr>
<tr>
<td></td>
<td>5/23/2016</td>
<td>Final Exam 5:15 – 7:30 PM (same room as class)</td>
</tr>
</tbody>
</table>