STATISTICS 119 Spring 2015
Elementary Business Statistics: section 3 (23176)

Instructor: Helen Noble  
E-mail: hanoble@mail.sdsu.edu  
Time: T 4:00 – 5:15 p.m.  
Room: ENS-280  
Thursday class meetings will be held online using Collaborate

Office: GMCS 518  
Office phone: 594 7245 (no voicemail)

Office Hours: TTH 2:00-3:00 p.m. & 5:45-6:30 p.m.  
Other times by appointment

Online office hours: by appointment.

Facts are stubborn, but statistics are more pliable. Mark Twain
Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write
H. G. Wells

Course Description:
This course is an introduction to statistics: topics covered will include measures of central tendency and variability, frequency distributions, probability, Bayes theorem, probability distributions (including binomial and normal), sampling distributions, confidence intervals, significance testing, regression and correlation.

Student Learning Goals:
After completing the course, students should be able to:
- Recognize whether an experiment or survey is well designed.
- Understand how to produce a sample that represents the population of interest.
- Summarize data using both graphical and numerical methods.
- Produce and interpret statistics and graphs, using regression techniques, to describe the relationship between two numerical variables.
- Use basic probability principles in a variety of practical applications
- Identify, and calculate probabilities for, binomial and normal probability distributions.
- Understand the concept of sampling distributions.
- Use statistical methods to construct, and interpret, interval estimates for population means and proportions.
- Formulate, test and interpret various hypotheses for population means and proportions.

Required Materials:
- Noble, H. Stat 119 Student Manual (blue cover: available at Aztec shops for $8.49)
- Calculator: Each student is required to have a TI-83 or TI-84
- IClicker
Additional Items:
- Additional course materials can be found on blackboard: [http://blackboard.sdsu.edu](http://blackboard.sdsu.edu).

Course Layout:
- There will be **10 on-line quizzes (completed in MyStatLab)**. Dates will be announced in class & posted on blackboard. There are **no make-up quizzes**. I will drop the lowest quiz score.
- **Homework** will be done using MyStatLab. Due dates for homework are available on MyStatLab & will be announced in class. **All** homework scores count toward your final grade.
- **Clickers**: Throughout the semester, we will be making extensive use of the iClicker that you **MUST** purchase in the bookstore. The “clicker questions” will be used to review lecture content. This way I get a feeling for how well the class understands the material, and you get some practice on questions similar to ones that will show up on the exams. The “clicker” participation points will be distributed as follows:
  - You will receive 2 points for each correct response to a “clicker question”
  - You will receive 1 point for each incorrect response to a “clicker question”
  - You will receive 0 points for “clicker questions” to which you do not respond
For the purposes of your course grade, you will be able to receive a maximum of 60 points for participation in response to “clicker questions”

**TO BE ABLE TO GET CLASS PARTICIPATION CREDIT**, you need to register your i>clicker remote on blackboard before the **second week of class**. The i>clicker will be used every day in class, and you are responsible for bringing your remote to class regularly. The registration directions can be found at [clicker.sdsu.edu/studentFAQ.html#6](http://clicker.sdsu.edu/studentFAQ.html#6).

- **REGISTER YOUR CLICKER THROUGH BLACKBOARD.** Follow the online directions for Blackboard. The clicker may come with directions to register on the iclicker website, but that is **not** needed.
- **YOUR CLICKER MAY NOT BE USED IN CLASS BY OTHER PEOPLE.** This is simply dishonest, and is a violation of academic integrity. Any infractions will be referred to Academic Affairs.
- There will be **two midterm exams**. Any test missed will result in an “F” for that test.
  - **Exam dates:**
    - Tuesday February 24th
    - Tuesday April 14th
- The final will be comprehensive
  - **Final date:** Saturday, May 9th 8:00-10:00 a.m.

You must bring a No. 2 pencil and ParScore form F-289 to each test: none will be provided.

- I would encourage any student who feels they might need additional help with the material to consider enrolling in Stat 119A. This is a one unit recitation course designed to give students problem solving practice in a small class setting.
Grading:

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>180</td>
<td>18%</td>
</tr>
<tr>
<td>Homework</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>Clicker question participation</td>
<td>60</td>
<td>6%</td>
</tr>
<tr>
<td>Two midterms</td>
<td>360</td>
<td>36%</td>
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<tr>
<td>Final</td>
<td>300</td>
<td>30%</td>
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</tbody>
</table>

Two percentage points will be added for those students who successfully complete Stat 119A

Grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>92.6%-100%</td>
<td>A</td>
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<tr>
<td>90%-92.5%</td>
<td>A-</td>
</tr>
<tr>
<td>87.6%-89.9%</td>
<td>B+</td>
</tr>
<tr>
<td>82.6%-87.5%</td>
<td>B</td>
</tr>
<tr>
<td>80%-82.5%</td>
<td>B-</td>
</tr>
<tr>
<td>77.6%-79.9%</td>
<td>C+</td>
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<tr>
<td>Less than 55%</td>
<td>F</td>
</tr>
<tr>
<td>70.0%-77.5%</td>
<td>C</td>
</tr>
<tr>
<td>67.6%-69.9%</td>
<td>D+</td>
</tr>
<tr>
<td>55%-67.5%</td>
<td>D</td>
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How to Be Successful in This Course:

- Review all Collaborate sessions the day they are assigned (each Thursday).
- Be disciplined: spend time regularly working on the course assignments.
- Attend EVERY lecture. Missing just one class can put you behind. Take an interest in your grade from DAY 1. Waiting until the end of the semester to improve your grade will not work.
- Read the chapters thoroughly including the chapter summary and the formulas at the end. Due to the time frame, lectures will not cover every concept in detail, so it is your responsibility to read the chapter BEFORE class and before attempting the homework.
- Please come to my office hours prepared with specific questions. **Be proactive: If you are in need of help, get it immediately.** That is what my office hours are for (they begin the second week of class). GTA’s will be offering tutoring starting the second week of class. I will post their hours on Blackboard. Use this great resource! **This is a free service**
- Study effectively: redo all problems from the lecture notes, practice quizzes and practice exams. Use flashcards to help you remember terminology. Reread your notes from class and the chapters from the text. Form study groups with others in the class. Sometimes you can better understand the material after discussing it with your peers.

**SDS**

Student Disability Services (594-6473) is the campus office responsible for determining and providing appropriate academic accommodations for students with disabilities. Students needing these services should visit the following site: [http://go.sdsu.edu/student_affairs/sds/](http://go.sdsu.edu/student_affairs/sds/)
**Academic Dishonesty:**
Academic misconduct will not be tolerated. The following steps are usually taken with a student caught cheating: The instructor will normally record a zero or an “F” for that exam, quiz, homework or project; although the instructor may decide to give an “F” grade for the course. All cases of academic dishonesty will be reported to the Center for Student Rights and Responsibilities. The office will investigate complaints in order to determine whether University disciplinary action is to be pursued. For more information on SDSU’s policies and procedures regarding academic misconduct visit the following site: [http://www.sa.sdsu.edu/srr/index.html](http://www.sa.sdsu.edu/srr/index.html)

**Additional Items:**
- Turn your cell phones off (not on vibrate) before entering class and put them away for the entire class. You will not be able to use the phone as a calculator.
- Put away ipods, other musical devices, and newspapers before the start of class.
- Please do not bring laptop computers to class.
- Please do not talk during lecture. It is both disrespectful and disruptive.
- I make every effort to start and end class on time. Please respect the 75 minutes of class time; do not pack up early—it disturbs those around you.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Reading assignment</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 21-23</td>
<td>Statistics &amp; variation Surveys &amp; sampling, experiments Displaying and Describing Categorical Data</td>
<td>Read Chapters 1-3</td>
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<tr>
<td>2</td>
<td>Jan 26-30</td>
<td>Displaying and Describing Categorical Data Displaying and Describing Quantitative Data</td>
<td>Read Chapter 4-5</td>
</tr>
<tr>
<td>3</td>
<td>Feb 2-6</td>
<td>Displaying and Describing Quantitative Data Correlation &amp; Linear Regression</td>
<td>Read Chapter 5-6</td>
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<td>Schedule adjustment deadline: Feb. 3</td>
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<td>4</td>
<td>Feb 9-13</td>
<td>Correlation &amp; Linear Regression Randomness &amp; Probability</td>
<td>Read Chapter 6-7</td>
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<td>5</td>
<td>Feb 16-20</td>
<td>Randomness &amp; Probability Review for exam 1</td>
<td>Read Chapter 7</td>
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<td>6</td>
<td>Feb 23-27</td>
<td>MIDTERM #1 (February 24th)</td>
<td>Study for exam</td>
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<tr>
<td>7</td>
<td>March 2-6</td>
<td>Random Variables &amp; Probability Models</td>
<td>Read Chapter 8</td>
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<tr>
<td>8</td>
<td>March 9-13</td>
<td>Random Variables &amp; Probability Models</td>
<td>Read Chapter 8</td>
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<tr>
<td>9</td>
<td>March 16-20</td>
<td>Sampling Distributions and Confidence Intervals for Proportions</td>
<td>Read Chapter 9</td>
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<tr>
<td>10</td>
<td>March 23-27</td>
<td>Testing Hypotheses about Proportions</td>
<td>Read Chapter 10</td>
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<td>March 30-Apr 3</td>
<td>Spring break</td>
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<tr>
<td>11</td>
<td>April 6-10</td>
<td>Testing Hypotheses about Proportions Review for exam 2</td>
<td>Read Chapter 10</td>
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<tr>
<td>12</td>
<td>April 13-17</td>
<td>MIDTERM #2 (April 14th)</td>
<td>Study for exam</td>
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<tr>
<td>13</td>
<td>April 20-24</td>
<td>Confidence Intervals &amp; Hypothesis Tests for Means</td>
<td>Read Chapter 11</td>
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<tr>
<td>14</td>
<td>April 27-May 1</td>
<td>Confidence Intervals &amp; Hypothesis Tests for Means</td>
<td>Read Chapter 11</td>
</tr>
<tr>
<td>15</td>
<td>May 4-7</td>
<td>Confidence Intervals &amp; Hypothesis Tests for Means</td>
<td>Study for Final Exam</td>
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<td>May 9</td>
<td>FINAL EXAM: 0800-1000</td>
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