QUAN 2600: Business Statistics I
Spring 2013 Course Syllabus

Professor: Brandon C. Koford
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Class:
Course 33749 – MWF 9:30AM – 10:20AM, Wattis 110
Course 33752 - MWF 10:30AM – 11:20AM, Wattis 110

Office Hours: MW 1:00PM –3:00PM, and by appointment

Course Description

Introduction to concepts and applications of statistics in business and economics. Topics include summary statistics, probability distributions of random variables, sampling, and estimation. Class will include use of computers. Prerequisite: MATH QL1050 with a “C” or higher grade (or CR if taken on a CR/NC basis) or equivalent as determined by the Math Department.

Course Objectives

The student will demonstrate mastery of basic statistical terminology through defining and discussing the terminology as well as applying it to materials in homework and exams; describe fundamental characteristics of data both graphically and numerically; apply principles of probability to business and economic decisions; and use software to facility computation of statistical quantities. In addition my specific learning objectives, this course also satisfies Department of Economics Learning Objectives which can be seen at the end of the syllabus.

Required Materials


Calculator and Software

You will need a non-graphing calculator for this class. Please choose a calculator that you are comfortable with and know how to use. Other devices (like cell phones, iPods, PDAs, netbooks etc.) though they may have calculator applications, will not be permitted on tests or quizzes.

Additionally we will use Microsoft Excel throughout the semester. MS Excel should be available on most on-campus computers as well as home computers equipped with Microsoft Office.

Teaching Philosophy & Methods

During the semester I hope to serve as your guide through statistical concepts. As your guide I will be able to direct your studies, point out interesting ideas, indicate real world relevance, and hopefully trigger your curiosity to learn more. It will be your job as members of the class to experience the material presented. Learning is not a spectator sport: maximum learning results from maximum involvement.
Our textbook author explains the statistical concepts in relatively simple terms with an emphasis on business and economics applications. With assigned questions as a guide, you can get the basics from the text with careful and thoughtful reading.

In class, we will work together on the more demanding parts of the course -- analyzing, applying, synthesizing, and evaluating the statistical ideas. Class time will be a mixture of lecture, discussion, and doing problems. Lecture will be used to motivate, clarify, extend, and synthesize the material. Discussion will be used as a means of motivating students’ critical thinking. Problems will focus on fine tuning statistical skill.

Regularly, you will work together with your classmates during class. I will ask you to compare answers to a problem or work together on a question with your neighbor.

**Evaluation Criteria**

Your grade will be determined on a standard 100 point scale. A: 90% to 100%, B: 80%-89%, C: 70%-79%, D: 60%-69%, F: 59% and below. If I feel that a curve is necessary it will be determined separately for each exam and announced in class when I return that exam. Grading in the course will be based upon assignments, quizzes, 2 mid-semester exams and a cumulative final exam. A breakdown of the scoring appears in the table below.

<table>
<thead>
<tr>
<th>Task</th>
<th>% of Course Grade</th>
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<tbody>
<tr>
<td>In-Class Assignments</td>
<td>10%</td>
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<tr>
<td>Quizzes</td>
<td>15%</td>
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<tr>
<td>Exam I</td>
<td>25%</td>
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<tr>
<td>Exam II</td>
<td>25%</td>
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<tr>
<td>Final Exam (Cumulative)</td>
<td>25%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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**Assignments & Quizzes**

In-class assignments will be given for participation and attendance credit. **Quizzes** are based on assigned homework problems and will be graded on a zero to three scale. A score of zero means the problem was not tried and a score of three means problem was tried and solved correctly. Quizzes will follow each chapter. In-class assignments and quizzes give students a chance to actively apply the material being learned and also to provide a chance to assess strengths and weaknesses before taking the exam. The student will greatly benefit by actively reviewing material on assignments. In-class assignments may only be turned in during the class time in which they are assigned. See the attendance policy below for more information.

**Exams**

Exam questions will reflect information and ideas presented both in lecture and the assigned readings. There will be two mid-semester exams and a cumulative final. Exams will be administered through Chi Tester at one of the following Weber State University Testing Centers: Davis, Marriot, Morgan, Natural Science, Social Science, Student Services, Union, or West. There are no make-ups for missed exams. If a student misses a mid-term exam the final exam will be weighted to adjust for the missed mid-term exam (i.e. the final would be worth 50% of the final grade rather than 25%). I will also substitute the final exam grade for the lowest mid-term exam score if it is in the favor of the student. If a student misses more than one exam, the final will be weighted to adjust for the first missed exam, and a zero will be recorded for the other exam. There are no make-up exams for the final.
Exams will be held in the testing center on the following dates:

- Exam I  Tuesday, February 12 – Saturday, February 16
- Exam II  Tuesday, March 19 – Saturday, March 23
- Final Exam  Wednesday, April 17 – Wednesday, April 24

**Appeal Procedure**

Anyone feeling that a dispute exists after the grading of an exam may submit a written grievance. This grievance should identify the item in dispute and arguments supporting the student's position. The appeal should be stapled to the document of question and must be submitted within two class periods following its return. I agree to return a written response to the student's grievance within two class periods from receipt of the grievance.

**Attendance Policy**

I do not take role; however, in order to give you an incentive to attend class, in-class assignments and quizzes cannot be made up or turned in late. Turning in an in-class assignment for someone who is absent or leaves class early will result in a loss of all assignment points for both parties involved (i.e. 10% of the final grade). If you choose to attend, which I highly recommend, please arrive on time, be courteous to your fellow classmates, and stay for the duration. Should you anticipate arriving late or leaving early, please let me know in advance.

**Cheating**

Cheating is in no way tolerated at Weber State University. Anyone caught cheating will be penalized severely. The full penalty will be determined in consultation with the Chair of the Department of Economics. More information can be found at [http://www.weber.edu/ppm/Policies/6-22_StudentCode.html](http://www.weber.edu/ppm/Policies/6-22_StudentCode.html)

**Students with Disabilities**

Students requesting classroom accommodations or modifications due to a documented disability must contact the Services for Students with Disabilities located in Student Services 181. See also [http://weber.edu/ssd/default.html](http://weber.edu/ssd/default.html)

**Course Outline**

The following is a tentative outline of the material covered in this course

- Chapter 1 – Data and Statistics
- Chapter 2 – Descriptive Statistics: Tabular and Graphical Presentations
- Chapter 3 – Descriptive Statistics: Numerical Measures
- Chapter 4 – Introduction to Probability
- Chapter 5 – Discrete Probability Distributions
- Chapter 6 – Continuous Probability Distributions
- Chapter 7 – Sampling and Sampling Distributions
- Chapter 8 – Interval Estimation
- Chapter 9 – Hypothesis Testing (Time Permitting)

**Department of Economics Learning Outcome for QUAN 2600**

- Economics majors will be numerically literate, and possess strong written and oral communication skills.
- All Economics majors should be able to use statistical methods for problem solving (e.g., hypothesis testing, regression analysis)