

BUSSTAT 207
Introduction To Business Statistics
Summer, 2008

Instructor:

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Course Objectives:

This course introduces you to the basic concepts of statistical analysis with an emphasis on how statistical tools are applied to assist in business decision making. The course will cover the basic tools of used to describe data for the purposes of transforming data into information. In addition the course will present the fundamentals of statistical inference showing how it is possible to examine a small subset of data to reach conclusions about the larger set of data.

The statistical tools will be introduced from an applied perspective using many business related examples. Students will learn how to employ Microsoft Excel software to aid in their statistical analysis.

Text:

Required:

Business Statistics: A Decision-Making Approach, 7th Edition by, Groebner, Shannon, Fry, and Smith. Prentice Hall, 2008

Optional:

Student Solutions Manual to Accompany Introduction to Business Statistics

Prerequisites:

Math 143 or Math 147 with a grade of “C” or higher.

CIS 104-105 or passing the placement exam

Expected Course Outcomes:

Students who successfully complete this course with a grade of C or better should be able to:

- Formulate a plan for collecting sample information that may be analyzed using statistical tools
- Summarize and present data in an effective manner through graphs, charts, tables, and numerical measures
- Model and explain business data and relationships using probability as a tool
- Model and explain the results of random sampling in business using the binomial and normal probability distributions
- Develop and interpret confidence interval estimates for the characteristics of a single population and for comparisons of the characteristics of two populations
- Formulate and analyze statistical hypotheses about the characteristics of a single population or about the comparison of two populations
- Effectively communicate the results of a statistical analysis both orally and in writing
- Use Excel software as a tool to store, organize, analyze and present data

Students will be required to demonstrate competence in the above items through a variety of assessment techniques including applied examinations, short quizzes, assignments, and projects.

Course Outline

- May 19 Course Introduction and Excel Orientation
Data and Data Collection [Chapters 1]
Presenting Data in Tables and Charts [Chapter 2]
- May 20 Chapter 2 Review
Describing Data Using Numerical Measures [Chapter 3]
- May 21 Chapter 3 Review
Using Probability & Probability Distributions [Chapter 4]
- May 22 Chapter 4 Review
Exam 1 (Chapters 1-4)
Excel Assignment (Due, May 27th)
- May 26 Memorial Day Holiday – No Class
- May 27 Discrete Probability Distributions [Chapter 5]
Continuous Probability Distributions [Chapter 6]
- May 28 Introduction to Sampling Distributions [Chapter 7]
Estimating Population Values [Chapter 8]
- May 29 Chapter 5-8 Review
Exam 2 (Chapter 5-7)
- June 2 Introduction to Hypothesis Testing [Chapter 9]
- June 3 Estimation and Hypothesis Testing for Two Population Parameters
[Chapter 10]
Hypothesis Tests for One and Two Population Variances
[Chapter 11]
- June 4 Course Review
Exam 3 (Chapter 1-11)

Educational Opportunities

Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Homework	100 points
Excel Assignment	100 points
Quizzes	<u>100 points</u>
Total	600 points

Grading

97-100% = A+
92-96.99% = A
90 - 91.99% = A-
87 - 89.99% = B+
83 - 86.99% = B
80 - 82.99% = B-
77 - 79.99% = C+
73-76.99% = C
70 - 72.99% = C-
60-69% = D

Daily Assignments:

The text is loaded with homework problems. Homework Problems will be assigned for each chapter. On the due date, one problem from each chapter will be randomly selected to be graded. No late homework will be accepted.

Quizzes:

You can expect one or more quizzes each day. Each quiz will be worth the same number of points. These will be graded on a percentage basis and then the overall percentage grade will be factored to 100 points. The low quiz (or missed quiz) will be dropped.

Exams:

We will have three mid-term exams. These will be problem oriented exams requiring you to demonstrate your understanding of the course material. You will be allowed 1 page of notes at each exam and can use the text book to look up statistical tables. No make up exams will be given during the term.

Excel Analyses:

An Excel case analysis will be assigned during the semester to help you learn how to apply descriptive statistical tools. The case will be graded on the basis of quality of statistical analysis and interpretation, and format of the final submitted product.

No late cases will be accepted. All cases must be submitted in a professional format and must be typed, double spaced, 12 point, Times Roman Font. All Excel output must be inserted into the document and appropriately labeled.

Class Attendance:

Students are encouraged to attend every class period. However, it is recognized that there are reasons that occur which require a student to miss a class period. Attendance records will not be kept.

Academic Honesty:

Although you are encouraged to study together and to help each other, you are responsible to submit your own original work. You can receive no outside help from students or other persons on any exams, quizzes or assignments other than that which is specifically specified by the instructor.

Please refer to the Boise State University Academic Honesty policy in the Undergraduate Catalog if you have any questions.