

U296-241 Business Statistics

Course Format: Online

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Course credits: 3

Prerequisites: Completion of a college-level mathematics course with a C or better, or the equivalent.

Course Description:

This course is designed to give you the ability to analyze data in a useful way. It should also provide you with the capacity to understand how you and others use (and abuse!) data and the information available from it. Topics include the description of both nominal and quantity data, probability distributions, statistical inference (estimation and hypothesis testing), and regression analysis. This course will provide you with the practical skills needed in business, science, the public sector, and other areas of society, where analysts and decision-makers need to draw conclusions from data, which will in turn better inform the decisions they must make. In essence, we will learn to analyze, collect, and organize data as well as how to use that data for practical decision making.

Required Course Materials

- David P. Doane and Lori E. Seward, Essential Statistics in Business and Economics (3rd edition), McGraw Hill, NY, NY. 2020. ONLINE WITH CONNECT SOFTWARE. Purchase through Canvas ONLY.
- Access to Excel

Hardware Requirements

You will need a webcam, speakers, and a microphone. You will complete your exams through an online proctor, requiring all three components.

Course Learning Objectives

1. Summarize collected data to understand the variable(s)
2. Apply the concepts of probability to probability distributions
3. Make a statement about the population from a sample of data

Course Overview

UNIT #	UNIT TOPIC	EVALUATED ACTIVITIES
Unit 1	introduction	Smartbook: Ch. 1 and Ch. 2 Quizzes: Ch. 1 and Ch. 2
Unit 2	Describing Data	Smartbook: Ch. 3 and Ch. 4 Quizzes: Ch. 3 and Ch. 4 Homework: Ch. 3 and Ch. 4 Test #1 (Chapters 1 through 4)
Unit 3	Probability	Smartbook: Ch. 5, Ch. 6, and Ch. 7

		Quizzes: Ch. 5, Ch. 6, and Ch. 7 Homework: Ch. 5, Ch. 6, and Ch. 7 Test #2 (Chapters 5 through 7)
Unit 4	Sampling and Confidence Intervals	Smartbook: Ch. 8 Quizzes: Ch. 8 Homework: Ch. 8
Unit 5	Hypothesis Testing	Smartbook: Ch. 9 and Ch. 10 Quizzes: Ch. 9 and Ch. 10 Homework: Ch. 9 and Ch. 10 Test #3 (Chapters 8 through 10)
Unit 6	Regression	Smartbook: Ch. 12 and Ch. 13 Quizzes: Ch. 12 and Ch. 13 Homework: Ch. 12 and Ch. 13 Test #4 (Chapters 12 through 13)

Evaluation Methods

Your final grade will be based on your performance on the following:

- 1) Smartbook (Online Chapter Reviews) Ch. 1-10 and Ch. 12-13 (30 points each)
- 2) Quizzes (Online Chapter Quizzes) Ch. 1-10 and Ch. 12-13 (50 points each)
- 3) Homework Ch. 3-10 and Ch. 12-13 (Units 2-3, 5-6 60 points each, Unit 4 30 points each)
- 4) Tests (Tests #1 and #2 200 points each, Test #3 300 points, Test #4 180 points)

Smartbook (360 points in total)

These assignments are chapter review questions, through the CONNECT software designed as reading and topic comprehension.

Quizzes (600 points in total)

These quizzes are designed to demonstrate student mastery of important chapter material, through the CONNECT software.

Homework (270 points in total)

These assignments, submitted through Canvas "Assignments," are graded by your instructor and concentrate on applications of the course material.

Tests (880 points in total)

The periodic examinations are designed to demonstrate student mastery of important material and are graded by your instructor.

Exam Method: Online with Proctoring

This course requires all students to complete 4 exams online with a proctoring service. Students receive one attempt on each exam.

Grading Scale

The following grading scale is used to evaluate all course requirements and determine your final grade:

A = 93–100%	B = 83–87.9%	C = 70–77.9%	D = 60–69.9%
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AB = 88–92.9%	BC = 78–82.9%		F = Below 60%
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Pass/Fail Option

Students who enroll in an Independent Learning (IL) course under the pass/fail option will receive a final grade of S in place of a final grade equivalent to an A, AB, B, BC, or C and a final grade of U in place of a final grade equivalent to a D or F.