

# *Essentials of Statistics for Business and Economics*



Boston College  
Department of Economics

EC 151.03 Fall 2004  
Statistics  
MWF 10:00 AM  
Classroom: Gasson 204

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**Office Hours:** W, 11:00-12:00; 12:30-1:30; or by appointment

**Required Text:** *Essentials of Statistics for Business and Economics*, by Anderson, Sweeney & Williams, 3rd edition (Southwestern Publishing, 2003).

“There are lies; damn lies; and statistics.”

A very famous American writer said so. (Guess who is he?)

Without mathematics, no social science is perfect.

(Again, guess who said this?)

Our everyday lives are surrounded by seemingly chaotic numbers. Many of our everyday decisions are based on those numbers. If you want to have the ability of telling lies from truth, you must learn statistics. Even if you have an amazing intuition or insight in seeing through numbers, a good understanding of statistics will definitely give you powerful support.

This course is a required course for students majoring in economics and business. You will learn basic statistical reasoning and extensive applications of statistics in business and economics.

## **Course Requirements:**

Do not be panic. No prerequisite is necessary for this course except a working knowledge of high school algebra.

There will be two hourly midterm exams and one two-hour final exam.

You are required to finish 8 problem sets, one for each chapter from Ch.2 to Ch.9. Problem sets must be handed in on the due day class. Later problem sets will not be accepted.

There will be one team (two or three students form a group) research project for Ch.12 and Ch.13. Each team will be required to collect data, estimate a simple model, and write up your conclusions. No more than two pages.

A list of research topics and data sources will be provided, however, you are encouraged to design your own projects.

Also you are strongly encouraged to learn at least one statistical software, such as Excel, SPSS, or Stata. Introduction to Excel will be given in class along this course. Some assignments will require the use of computer software.

### **Grading Procedure:**

Problem sets: 10%

Midterm 1: 20%

Midterm 2: 20%

Cumulative final: 40%

Team project: 10%

Class Participation is required. However, I will only randomly record attendance. Good attendance will give you a bonus if your overall grade is at the margin of a higher rank. For example, if your overall grade is B-, but only 1 point is needed to get B, then attendance could bump your grade to B.

All exams will be closed notes and textbook. No makeup and no points if you miss one. Should absence prove unavoidable before the exam, such as a verifiable medical reason, adjustment might be made. Please take the academic integrity policy of Boston College seriously.

(See <http://www.bc.edu/schools/cas/services/students>).

### **Tentative Schedule for Topics and Exams:**

Sep.8, 10

Introduction, Ch.1

Sep.13, 15, 17

Descriptive Statistics I, Ch.2

Sep. 20, 22, 24,

Descriptive Statistics II, Ch.3

Sep. 27, 29, Oct.1

Probability I, Ch.4

**Oct.4**

**Midterm Exam I**

Oct.6, 8, 13

Probability II, Ch.5

Oct.15, 18, 20, 22

Probability III, Ch.6

Oct. 25, 27, 29

Sampling and Sampling Distribution, Ch.7

Nov.1,3, 5

Interval Estimation, Ch.8

**Nov.8**

**Midterm Exam II**

Nov.10, 12,15, 17

Hypothesis Testing , Ch.9

Nov. 19, 22, 29, Dec.1

Linear Regression I, Ch.12

Dec. 3 , 6, 8

Linear Regression II, Ch.13

Dec.10

Review Session

Dec.18, Saturday, 9:00 AM

Final Exam