

# BOSTON COLLEGE

Department of Economics

**EC151.03**

**Statistics**

Fall 2001

Office Hours: Tu:Th: 10-11:30

Huanwei Zhao

Carney 33B

Phone: 28704

Email: [zhaohu@bc.edu](mailto:zhaohu@bc.edu)

## **Textbook:**

Anderson, Sweeney and Williams: Essentials of Statistics for Business and Economics, South-Western College Publishing, Second edition.

## **Course Organization and Expectation**

This is an introductory course in statistics. The primary goal is to make you familiar with the basics of probability and sampling theory. In this course, each section depends on the previous ones. So it is very important to keep up with the material. I expect you to come to every class, to read the text carefully and to work through the problem sets.

Joint work on problem sets are encouraged; however each student is expected to independently write up her/his own answers to be handed in.

There will be 4 to 5 short quizzes, with dates to be announced in classes. The lowest quiz grade will be dropped. There will be 3 exams: two midterms and one comprehensive final exam. Both midterm exams will be given outside of class so that there will be sufficient time to complete each exam. The first midterm exam will be on **Thursday, October 4, 2001 at 4:30** and the second will be on **Thursday, November 8, 2001 at 4:30**. There will be no make-up exams or quizzes. So please make sure you do not have a scheduling conflict with these dates. Your work on exams and quizzes is to be entirely your own.

## **Grading Policy:**

Your performance on problem sets will be used as evidence for up to one notch on your final grade(B- to B, B to B+, etc.)

If you do poorly on one midterm but consistently well on the other one, the final exam and the quizzes, the one poor exam will be discounted(but not completely ignored).

Quizzes	25%
Midterm Exam 1	20%
Midterm Exam 2	20%
Final Exam	35%

## Tentative Schedule of Topics

### **Descriptive Statistics**

Ch. 1-3

1. Graphical presentation of data. (2 lectures)
2. Measures of central tendency and dispersion. (2 lectures)

### **Probability Theory**

Ch. 4-7

1. Computation of probability. (3 lectures)
2. Discrete probability distribution. (4 lectures)
3. Continuous probability distribution. (4 lectures)

### **Statistical Inferences**

#### Estimation

Ch.8

1. Sampling distribution. (4 lectures)
2. Interval estimation for means. (3 lectures)
3. Interval estimation for proportions. (2 lectures)
4. Determination of confidence levels and sample size. (3 lectures)

#### Hypothesis testing

Ch.9

1. Elements of hypothesis testing. (1 lecture)
2. Errors in hypothesis testing. (2 lectures)
3. Large and small sample tests of hypothesis for the population mean. (3 lectures)
4. Test of hypothesis for population proportions. (3 lectures)

### **Regression**

Ch. 12

1. Simple regression. (2 lectures)
2. Multiple regression. (2 lectures)