BOSTON COLLEGE

Department of Economics

EC151.02
Statistics
Fall 2000
Office Hours: Tu:Th: 11-12:30

Huanwei Zhao
Carney 33B
Phone:28704
Email: 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 of this course is to make you familiar with the basics of probability and sampling theory. At the end of the course you should be able to understand when and how to apply statistical tools to data sets of interest. In this course, each section depends on the previous one. So it is very important to keep up with the material in this course. I expect you to come to every class, to read the text carefully and to work through the problem sets.

The problem sets will consist of questions and computer exercises. The computer exercises will use data contained on the CD-ROM that accompanies the text. Joint work on problem sets are encouraged; however each student is expected to independently write up his/her own answers to be handed in.

There will be a short quiz approximately every two weeks, with dates to be announced in classes. The lowest quiz grade will be dropped.

There will be three 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 5, 2000** at **4:30** and the second will be on **Thursday, November 9, 2000** 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 mid-term but consistently well on the other one, the final and quizzes, the one poor exam will be discounted(but not completely ignored).

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

Schedule of Topics

Descriptive Statistics	Ch.1-3
1. Graphical presentation of data and results for effective interpretation.	(1 lecture)
2. Measures of central tendency and dispersion.	(2 lectures)
Probability Theory	Ch.4-7
1. Computation of probability for simple and complex events.	(3 lectures)
2. Discrete probability distribution (Binomial and Poison).	(4 lectures)
3. Continuous distribution (Uniform, Normal)	(4 lectures)
4. Sampling distribution of sample means.	(3 lectures)
Statistical inferences	
Estimation	Ch.8
1. Large and small sample confidence interval estimation for means.	(2 lectures)
2. Confidence interval estimation for proportions.	(2 lectures)
3. 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. Tests of hypothesis for population proportions.	(3 lectures)
Regression	Ch.12
1. Simple regression	(2 lectures)
2. Multiple regression.	(1 lecture)
3. Testing hypothesis of regression coefficients.	(2 lectures)