# **BOSTON COLLEGE Department of Economics**

EC 151 08 & .09 Fall 1998 Niloufer Sohrabji Carney Hall 33 A, x 2-8703 Office Hours: T & Th 10:30 - 11:45 e-mail: sohrabjn@bc.edu

### **STATISTICS**

This is an introductory course in statistics. The primary goal of this course is introduce you to important statistical concepts and their applications. A grasp of the language of statistics is an essential part of understanding the material. The final objective is to use what you have learned to be able to draw inferences about a population based on a sample drawn from that population. The course is divided into three sections:

- 1) Descriptive statistics
- 2) Probability
- 3) Statistical inference estimation
  - hypothesis testing

The first section of descriptive statistics may be a review for some of you and will cover measures of tendency and dispersion, as well as graphical descriptions of data.

Probability will be covered in greater detail. It will include computation of probability of simple and complex events. This will be followed by a discussion of some of the more important probability distributions such as Binomial, Normal, etc.

The first two sections form the basis for the final topic of statistical inference i.e. estimation and testing of hypothesis. This includes computing and interpreting reasonable estimates of important unknowns. In addition, we will also test hypotheses regarding these unknowns.

Textbook: McClave, Benson and Sincich Statistics for business and economics

This text is required and should be purchased.

#### Course Requirements:

The course meets twice a week for lectures. There will be 2 in-class midterm exams and a comprehensive final exam. All exams are open book and notes.

In addition, there will be four computer exercises using Excel. The purpose of these exercises is to get you familiar with Excel and save you from tedious calculations. You may work on these exercises in groups.

There will be a short quiz every Thursday. The lowest quiz grade may be dropped. The purpose of frequent quizzes is to get you comfortable with the material at a regular pace, thereby relieving some of the burden on exams. Again, quizzes are open book.

Problems from the book will be assigned at every class and will be discussed in the next class. Assigned problems will not be graded but will be a source of ideas for quizzes and

exams. Although there will frequently be an overlap between these problems and computer exercises, it should be clear that they are both important and not substitutes for each other.

This course is hierarchical, with each section dependent on the prior ones. Therefore, it is a bad idea to fall behind in statistics. Attendance is not taken in class, but is recommended.

## **Grading Policy**:

Quizzes	20%
Computer exercises	10%
Exam I (Oct. 1st)	15%
Exam II (Nov. 5th)	20%
Final Exam	35%

There will be <u>no make-up exams or quizzes</u>, so please keep a note of the dates. Computer exercises handed in late (dates to be announced in class) will be marked down.

## Academic Integrity:

I expect all students to do only their own work on quizzes and exams. Joint work on problem exercises is encouraged.