

BOSTON COLLEGE
Department of Economics

EC 151.09
Statistics
Fall, 2002
Meeting Times: T-TH 12:00
O'Neill Library 253

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Office Hours: T-TH 10:30-11:30
Carney 33 A

Required Text:, Anderson, Sweeney and Williams, Statistics for Business and Economics, 8th edition.

Course Requirements: 1 midterm exam(30 %), on November 5th.
Quizzes (30%), dates to be determined
Final Exam (40%).

Notes:

- Students are expected to attend classes.
- There will be **no make-up exams**. If you miss an exam for a good reason you will be graded based on the other exams.
- Problem sets will be handed out during class regularly. They will be not collected or graded. You are strongly encouraged to solve them. They will be discussed and solved in class
- Your work on exams is to be entirely your own. In other words, cheating will not be tolerated. Be sure you are familiar with the sections on “Academic Honesty” in the Undergraduate Catalog.

This is an introductory course in statistics and probability. If time allows, some basic material on regression analysis will be covered.

Syllabus

TOPICS	TIME (aprox.)
0. Introduction	(1 week)
1. Data. (Chapter 1) Basic Definitions: Observation, Variables, Different type of data.	
2. Descriptive Statistics (Chapters 2-3) How to summarize the data: Graphical and Tabular Analysis Numerical Methods Location Measures Dispersion Measures Association Measures	(2 weeks)
3. Probability (Chapter 4) Introduction Basic Probability Relations Conditional Probability Bayes Theorem	(2 weeks)
4. Random Variables and Probability Distributions Discrete Distributions (Chapter 5) Binomial Poisson Hypergeometric Continuous Distributions (Chapter 6) Uniform Normal Exponential	(3 weeks)
5. Sampling and Estimation (Chapters 7-8) Samples and Populations Random sampling Estimation of Parameters Sampling Distributions Properties of Estimators Interval Estimation	(2 weeks)
6. Hypothesis Testing (Chapter 9) Null and Alternative Hypothesis Test of Hypothesis Type I and Type II errors One and Two Tailed Tests	(2 weeks)
7. Statistical Inference (Chapters 10-11)	(2 weeks)
8. Linear Regression (Chap 14) Least Square Method and Gauss-Markov Theorem Test of Significance: t test, F test. Prediction	(if time allows)