

Boston College
Department of Economics

EC 151.06-07
Statistics
Spring 1999

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Statistics for Business and Economics

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. The course has four sections:

1. Descriptive statistics
2. Probability theory
3. Statistical inference
 - estimation
 - hypothesis testing
4. Regression analysis

At the end of this course you will not be a theoretical statistician, but you will be able to understand when and how to apply statistical tools to data sets of interest to you.

Required Text: Statistics for Business and Economics, Anderson, Sweeney & Williams, 7th ed. (West Publishing Company).

Office Hours: M: 3:00 - 5:00. If you can not meet me at this time, please make an appointment. The ADC (Academic Development Center) in O'Neill also has tutors available for you to consult.

Course Requirements: four quizzes (5% each), two mid-term exams (20% each), final exam (40%).

Course Organization and Expectations: the class meets three times a week (MWF 1-2 or 2-3) in Fulton 115. The course will closely follow the text. There are no formal prerequisites for this course. I will present in class the main elements of the mathematical techniques required.

You are held responsible for all readings, assignments and announcements made in class. You are strongly advised to complete eight problem sets consisting of both theoretical and empirical exercises. For computer exercises, I advise you to use the Excel spreadsheet, available at the O'Neill computer center. Team work on problem sets is encouraged. I will provide answers to all problem sets. The first mid-term exam will be on Feb. 22 (4-6 p.m.) and will cover the first two sections of the course. The second mid-

term exam will be on Apr. 12 (4-6 p.m.) and will cover the third section of the course. The final exam (May 8, 12.30 p.m. for section 7 and May 13, 12.30 p.m. for section 6) is cumulative, covering all the material you saw during the course. All exams (except quizzes) will be open books and open notes exams. You are allowed to bring a non-programmable calculator. No make up exams will be given. Should you miss an exam, I will need a letter from your Dean saying that it was an approved absence.

If school happens to be canceled on the day of the scheduled exam, the exam will be given on the same day and time of the following week.

Class attendance, even not compulsory, is important. I strongly recommend that you do not cut classes and ask questions.

Please, be aware that cheating on any exam will result in an automatic failing grade on the exam in question.

Grading Procedure:

$A = 92$ or above	$B^- = 78 - 75$	$D^+ = 61 - 58$
$A^- = 91 - 88$	$C^+ = 74 - 71$	$D = 57 - 53$
$B^+ = 87 - 84$	$C = 70 - 66$	$D^- = 52 - 49$
$B = 83 - 79$	$C^- = 65 - 62$	$F =$ under 49

Tentative Schedule for Topics:

<u>Descriptive Statistics:</u>	Chapter 1-2-3	Jan. 20, 22, 25, 27
<u>Probability Theory:</u> (Bayes' Theorem)	Chapter 4	Jan. 29 / Feb. 1, 3, 5
<u>Discrete Probability Distributions:</u>	Chapter 5	Feb. 8, 10, 12
<u>Continuous Probability Distributions:</u>	Chapter 6	Feb. 15, 17, 19, 22
<u>Sampling and Sampling Distributions:</u>	Chapter 7	Feb. 24, 26 / Mar. 8, 10
<u>Interval Estimation:</u>	Chapter 8	Mar. 12, 15, 17
<u>Hypothesis Testing:</u>	Chapter 9,10	Mar. 19, 22, 24, 26, 29, 31 / Apr. 7, 9
<u>Simple Regression:</u>	Chapter 14	Apr. 12, 14, 16, 21, 23
<u>Multiple Regression:</u>	Chapter 15	Apr. 26, 28, 30 / May 3

