

SYLLABUS
BU 234
Applied **Statistics**

"the object of computing is insight, not numbers"

Unknown

Since the early days of World War II, when teams of scientists were assembled in the United States and Great Britain to research mathematical approaches to operational problems, the use of quantitative analysis as a decisionmaking aid has expanded at an ever-increasing rate. Today, the techniques that have been developed are so well known to military planners, public administrators, businesspersons and others, that words such as **model, cost-effectiveness, simulation** and **optimization**, to mention only a few, are common in our everyday vocabulary. Indeed, it is difficult to imagine a problem of any significance that does not make use of quantitative methods to some extent.

Thus, the modern manager is faced with the compelling requirement to become and remain informed about the various approaches that may be used to conduct a quantitative analysis of his or her problem.

COURSE OBJECTIVE

To gain a working knowledge of statistical methods and an understanding of the theory behind these methods

OUTLINE

Introduction	Chapter 1
Sampling	Chapter 8.1-8.3, 20.1-20.2
Data Presentation	Chapter 2
Frequency Distributions	Chapter 3
Summary Measures	Chapter 4
Probability Concepts	Chapter 5
Discrete Distributions	Chapter 6
Normal Distributions	Chapter 7
Sampling Distributions	Chapter 8
Continuous Distributions	Chapter 9
Estimation	Chapter 10
Hypothesis Testing	Chapter 11
Regression	Chapter 13 & 14*
Nonparametric Statistics	Chapter 17*

* If time permits

TEXT

Lee, Cheng F., Statistics for Business and Financial Economics,
D.C. Heath & Co., Lexington, MA, 1993

GRADING

Tests	60%
Final Project	40%

All examinations will be open book, open notes. The final letter grade will be assigned by totaling the points from each graded item. No letter grades will be given for individual tests and quizzes. Attendance is expected and will be reflected in the quiz grades. There is no make up for missed quizzes. The lowest quiz will be dropped. Quizzes may be announced or unannounced. Homework may be collected periodically for grading as a quiz. An exam can be made up only if the instructor is notified before the exam. The final will be cumulative, with emphasis on the last section of material.

OFFICE HOURS - By request Telephone 438-8972 / 833-0230. Fax 833-0230
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Assignments

<u>Chapter</u>	<u>Read</u>	<u>Problems</u>
1	All	4,5,7,12
8	8.1, 8.2, 8.3	15, 18, 20
20	20.1, 20.2, 20.3 (Text Only)	1,13,14,21,33
2	All (Not Apndx)	3,4,5,6,8,17,51
3	Omit pp 74-80	1, 2, 3, 6, 7, 9, 38, 40, 41
4	Omit 4C	1, 4, 7, 10, 14, 17, 21, 27, 30, 55
5	All	1, 4, 6, 9, 12, 16, 21, 33, 70, 78
6	Omit 6.8,6.9	1, 2, 5, 6, 10, 11, 14, 24, 25, 27, 34
7	Omit 7.4, 7B	2, 3, 4, 8, 10, 18, 21, 33, 36
8	8.4 - 8.7	2, 3, 6, 23, 43, 58
9	All (Not Apndx)	2, 7, 8, 14, 19, 25, 29, 32, 37
10	ALL (Not Apndx)	1, 2, 4, 5, 6, 16, 22, 28, 31, 88
11	ALL (Not Apndx)	2, 3, 6, 10, 13, 45, 49, 59, 68, 72
13	All (Not Apndx)	2,10,13,21,26,70

The problem assignments are a minimum. The instructor may assign additional problems as necessary. Any student that has difficulty a problem type should do additional problems of that type to ensure full understanding. Additional problems may be obtained by the student who has completed all problems in the text.