

ST 260 SYLLABUS
Statistical Data Analysis
Spring 2007,
Tues/Thur 5PM

Instructor:

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REQUIRED Materials:

Introduction to Business Statistics, 5th edition
by Ron Weiers. Data Analysis Plus CD (Packaged with book) and MiniTab Student Edition.

COURSE DESCRIPTION

Introduction to basic statistical tools and concepts using computer packages for business applications. Graphical procedures and computation techniques are used to illustrate estimation and variation, probability, discrete and continuous probability distributions. Statistical inference is based on confidence interval estimation.

COURSE OBJECTIVES

After successful completion of this course, the student will:

- be able to view decision-making problems from a quantitative perspective.
- understand the importance of data collection and analysis in making business decisions.
- be able to assess technical presentations effectively.
- be proficient with graphical exploration tools for extracting information from data.
- have learned key tools and concepts very well, retain them, and use them in the future.
- see the relevance of statistics in everyday life.
- know when to be skeptical of data results.

PREREQUISITES

- a. CS 102 and MA 112, or equivalents.
- b. **EXCEL skills are essential.**

COURSE GRADE

Your course grade will be computed by:

	T1	T2	T3	Final	A/H/Q	Total*
Weight per test	20%	20%	20%	25%	15%	100%

Adjust your "**Course Total**" for "**Attendance.**"
(See *Course Contract* below.)

Plus/Minus grade given at the instructors' discretion."

EXAMS and ASSIGNMENTS

Exams: All Exams are comprehensive. Material will be from lectures, textbook, projects, and problem assignments. During exams, students may use a calculator. A formula sheet will be provided for tests.

Assignments & Projects: Assignments consist of practice problems, computer problems using EXCEL & Minitab. Selected practice problems *may be* graded. Computer assignments have a *high* probability of being graded. Group work is strongly encouraged and recommended for assignments, copying is NOT.

MAKE-UPS and OTHER ACCOMMODATIONS

- No make-up exams are given. Should you expect to miss an exam, contact the instructor immediately.
- Students with disabilities:** Register with the Office of Disability Services, 348-4285. Then, visit your instructor early in the semester to discuss accommodations and other special needs.

COURSE CONTRACT

- Consider yourself an "employee" of this course. You are expected to show up on all workdays, arrive on time and stay the entire workday (75 minutes). Failure to do so will result in compensation reduction (grade). Late arrival and early departure are 0.5 absence each.
- Attendance Adjustment to your "Course Total:"**
Miss ZERO classes, ADD 2 bonus points.
Miss exactly ONE class, ADD 1 bonus point.
Miss FOUR classes, DEDUCT 2 bonus points.
Each additional missed class deduct 1 more point.
- Note. There are NO EXCUSED absences. If you miss *more than three days (i.e., two weeks of regular classes)* for illness, please discuss your situation with the instructor.
- Prior to class lecture, you are expected to read sections of the text indicated in the syllabus or announced in class. After a lecture, you are expected work all home-work problems assigned in that class by the due date.

OUTSIDE OF CLASS ASSISTANCE

- Office hours for instructors and teachings assistants will be announced in class and posted on **Webct.**

Note: The instructor reserves the right to make changes to this syllabus during the semester. Announcements of changes will be made in class.

Date	Day	Topic
11-Jan	Thursday	Chapter 1 – Introduction to Statistical Thinking
16-Jan	Tuesday	Data Collection and Types; Graphical Displays of Data (1.1-1.7; 2.1-2.2)
18-Jan	Thursday	More Graphical Displays (2.3-2.5)
23-Jan	Tuesday	Good Graphs, Bad Graphs (2.4, 3.1.-3.2) Numerical Summary of Data
25-Jan	Thursday	Numerical Summary of Data (3.3-3.4)
30-Jan	Tuesday	Distributions: Data & Populations – Center, Variation, Shape (2.4, 6.4-6.5)
1-Feb	Thursday	Scatterplot and Correlation (2.5, 3.6, 15.1-15.2)
6-Feb	Tuesday	Regression Analysis (15.3)
8-Feb	Thursday	Regression Diagnostics (15.4)
13-Feb	Tuesday	Data Transformations (15.1-15.2)
15-Feb	Thursday	Review
20-Feb	Tuesday	Exam 1
22-Feb	Thursday	Basics of Probability (5.5) Conditional Probability and Independence
27-Feb	Tuesday	Dependencies in Two-Way Tables (5.5)
1-Mar	Thursday	Discrete Random Variables; Expected Value and Risk (6.1)
6-Mar	Tuesday	Binomial Distribution (6.2)
8-Mar	Thursday	Normal Distribution (7.1-7.3)
13-Mar	Tuesday	Spring Break
15-Mar	Thursday	Spring Break
20-Mar	Tuesday	Normal Distribution (7.1-7.3)
22-Mar	Thursday	Review
27-Mar	Tuesday	Exam 2
29-Mar	Thursday	Distribution of X-bars (8.1-8.2)
3-Apr	Tuesday	Hypothesis Tests concepts; margins of error (9.1-9.2)
5-Apr	Thursday	Confidence Interval and Hypothesis test for mean (9.3-9.4)
10-Apr	Tuesday	Confidence Interval and Hypothesis test for proportion(9.6-9.7)
12-Apr	Thursday	Inference for Comparing Two Populations (11.2, 11.4, 11.6)
17-Apr	Tuesday	Inference for Comparing Two Populations (11.2, 11.4, 11.6)
19-Apr	Thursday	Inference for Regression (15.5)
24-Apr	Tuesday	Review
26-Apr	Thursday	Exam 3
1-May	Tuesday	Multiple Regression (Chapter 16)
3-May	Thursday	Multiple Regression (Chapter 16)
8-May	Tuesday	Final Review
10-May	Thursday	Final EXAM 5:00 PM