

GOVERNORS STATE UNIVERSITY
College of Business and Public Administration

Course Title: STAT 361 Statistics for Management 1 ^A
Thursday 7:30-10:20/Friday 6:00-9:00

Session: Winter 1998

Instructor: Professor Edna Fry, M.B.A., C.P.A.

Phone: 708/ 534-4949

E-Mail: e-fry@govst.edu

Office Hours: Mon/Wed/Thurs: 6:30-7:30 p.m.
Friday: 5:00-6:00 p.m.
C-3397



Credit Hours: 3

Catalog Description:

Covers the basic topics of applied statistics, including the sample mean and variance, random variables, elementary finite probability, the binomial and normal distributions, sampling, point and interval estimation, control charts, and hypothesis testing as they apply in business situations.

Prerequisite: Intermediate algebra or passing computational examinations.

Textbook: (1) Anderson, Sweeney and Williams, Statistics for Business and Economics, West Publishing Co., 1996, Sixth Edition.
(2) Student Workbook for above

Expected Student Outcomes:

Upon completion of this course, the student is able to:

1. Designate the difference between discrete and continuous data.
2. Compute the mean, median, mode, percentiles, variance and standard deviation for samples of data.
3. Read, interpret, and create graphical representations of data, including run charts, pie charts, frequency polygons, normal probability plots, and histograms.
4. Compute simple and conditional probabilities, expected values, applying them to decision trees.

5. Apply the binomial, Poisson, and normal distributions to practical problems.
6. Describe and evaluate sampling designs and techniques.
7. Compute confidence intervals for means and proportions.
8. Test hypotheses using single sample designs.

Description:

This course is designed to help students use statistical techniques as they are used in business today, both in manufacturing and non-manufacturing settings. Topics include descriptive statistics, probability and probability distributions, sampling, confidence intervals and simple hypothesis testing for means and proportions, and the use of the techniques in Excel appropriate to these topics.

Evaluation:

| | | |
|--|--------------|------------------|
| Test I Class 7 | Chapters 1-4 | 125 points |
| Test II Class 15 | Chapters 4-8 | 125 points |
| Quiz (10)-- <u>NO MAKE-UPS</u> | | 100 points |
| Homework (Even Problems Each Chapter) | | 30 points |
| Excel | | <u>20 points</u> |
| | | 350 points |

90% - A
 80% - B
 70% - C
 60% - D
 Below - F
 60%

| <u>Class No.</u> | <u>Date</u> | <u>Topic</u> | <u>Chapter</u> |
|------------------|--------------|--|-----------------------|
| <u>Class 1</u> | Jan 15/16 | Data, Measurement & Statistics | 1.1-1.5 |
| <u>Class 2</u> | Jan 22/23 | Descriptive Statistic I Tabular & Graphical Approaches Quiz 1 | 2.1-2.5 |
| <u>Class 3</u> | Jan 29/30 | Descriptive Statistics II Measures of Location & Dispersion Quiz 2 | 3.1-3.3 |
| <u>Class 4</u> | Feb 5/6 | Descriptive Statistic II Measures of Location & Dispersion Introduction to Probability Quiz 3 | 3.4-3.7 4.1-4.3 |
| <u>Class 5</u> | Feb 12 13 | <i>NO CLASS</i> Introduction to Probability Quiz 4 | 4.4-4.5 |
| <u>Class 6</u> | Feb 19/20 | Introduction to Probability Quiz 5 | 4.6 Bayes' Theorem |
| <u>Class 7</u> | Feb 26/27 | TEST I | 1-4 |
| <u>Class 8</u> | Mar 5/6 | Discrete Probability Distributions | 5.1-5.4 |
| <u>Class 9</u> | Mar 12/13 | Continuous Probability Distributions Quiz 6 | 6.1-6.3 |
| <u>Class 10</u> | Mar 19/20 | Sampling & Sampling Distributions | 7.1-7.5 |
| <u>Class 11</u> | Mar 26/27 | Sampling & Sampling Distributions Quiz 8 | 7.6-7.8 |
| <u>Class 12</u> | Apr 2/3 | Interval Estimation Quiz 9 | 8.1 |
| <u>Class 13</u> | Apr 9/10 | Interval Estimation Quiz 10 | 8.2-8.4 |
| <u>Class 14</u> | Apr 16/17 | Review | 5-8 |
| <u>Class 15</u> | Apr 23/24 | FINAL EXAM | |