

Governors State University
College of Business and Public Administration

Course Number & Title: STAT 362 Statistics for Management II

Session: Sept - Dec 1994, Fall Trimester
Tuesday/Thursday: 9:30 - 10:45 a.m.
Thursday: 7:30 - 10:20 p.m.

Instructor: Professor Edna Fry

Phone No.: 708/534-4949

Office Hours: Tues/Thur: 10:45 - 11:45 p.m.
Tues/Thur: 6:00 - 7:30 p.m.
Office: C3350

Credit Hours: 3

Catalog Description:

A continuation of STAT 361. Topics covered include analysis of variance, regression, correlation, time series, indexing, nonparametric statistics, bivariate distributions, and chi-square tests. Students make extensive use of a statistical computer package in the analysis of data and application of statistical tests as they apply in business situations.

Prerequisites: STAT 361

Textbook:

Anderson, Sweeney and Williams, Statistics for Business and Economics, West Publishing Co., 1990, Fifth Edition.

Anderson, Sweeney and Williams, Student Workbook.

Expected Student Outcomes:

Upon completion of this course, the student will be able to:

1. Create and interpret Confidence Intervals.
2. Test hypothesis using one and two sample designs.
3. Compare three or more sample means with analysis of variance.
4. Use a chi-square analysis to compare several sample proportions and perform a goodness-of-fit test.
5. Apply the appropriate nonparametric test to make decisions about non-normally distributed data.
6. Describe and calculate correlation and regression analysis of bivariate data sets.
7. Measure change over time with index numbers.
8. Become familiar with and utilize minitab in the GSU computer system.

GSU ARCHIVES

Stat 362
Fry

Description: Topic for the second courses in Statistics include a review of the topics in Statistics I, hypothesis testing using one and two sample designs, analysis of variance, chi-square and other common nonparametric tests, regression, and correlation. Students are expected to have successfully completed Statistics I prior to enrolling in this course.

<u>Evaluation:</u>	Test I	100 points
	Test II	100 points
	Test III	150 points
	Homework	25 points
	Minitab	<u>15 points</u>
		390 points

No make-ups unless approved prior to the test.

<u>Average:</u>	90 - 100%	A
	80 - 89%	B
	70 - 79%	C
	60 - 69%	D
	50% - below	F

Homework: To learn the material, it is essential that you attempt the assigned homework on a timely basis. To receive full credit, homework must be turned in at the end of each class period.

Disclaimer: This syllabus is subject to change as the course progresses.

General Education Issues:

Writing and critical thinking skills are incorporated into this class through extensive case analysis discussions and writing assignments.

Syllabus Statement for Persons with Disabilities:

It is the intention of the institution to support full participation of all students, regardless of physical ability level. Therefore, if any student needs consideration of his/her physical abilities in order to complete the course, please notify the instructor as soon as possible.

TENTATIVE SCHEDULE

Week	Topic	Chapters
1	Interval Estimation	8
2	Hypothesis Testing	9
3	Statistical Inference About Means and Proportions with Two Populations	10
4	Test I	8, 9, 10
5	Inference About Population Variances	11
6	Test of Goodness of Fit & Independence	12
7	Experimental Design & Analysis of Variance	
8	Experimental Design & Analysis of Variance	
9	Test II	
10-11	Simple Linear Regression & Correlation	
12	Nonparametric Methods	
13	Decision Analysis	
14	Review	
15	Final Exam (comp.)	

TENTATIVE HOMEWORK

Chapter 8	Interval Estimation Problems: 3,5,7,11,15,21,31,33,39,51
Chapter 9	Hypothesis Testing Problems: 5,7,11,13,17,21,25,27,33,35,37,45,47,55,59,65,67
Chapter 10	Statistical Inference About Means & Proportions With Two Populations Problems: 3,5,7,12,16,17,19,24,27,29,33,35,37
Chapter 11	Inference About Population Variances Problems: 5,7,11,17,21,25,31
Chapter 13	Experimental Design Analysis Analysis of Variance (MINITAB) Problems: 3,5,6,7,11,13,17,19,27,37,39,42
Chapter 12	Test of Goodness of Fit & Independence Problems: 3,5,7,11,15,20,22,24
Chapter 14	Simple Linear Regression Analysis Correlation (MINITAB) Problems: To be assigned.
Chapters 15-16	To be assigned.
Chapter 19	Nonparametric Methods Problems: 2,10,17,18,21,27
Chapter 22	Decision Analysis Problems: To be assigned

5 Step Hypothesis Testing will be utilized in the Homework Assignments. Homework will be selected on a surprise basis! 7 assignments will be collected for a total of 30 points. 5 points each.