

GOVERNORS STATE UNIVERSITY
College of Business and Public Administration

Course Title: STAT 362 (Section A, Reference# 20215)
Statistics for Management II

Session: Spring 1996 (Block 2)

Time: 7:30-10:20 TR

Instructor: Professor David Parmenter

Office: C 3356

Office Phone: (708) 534-4961

Office Hours: 12:30-2:30 MW, 6:30-7:30 TR and by appointment



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: Statistics for Business and Economics (5th Ed.) by Anderson, Sweeney and Williams. The Student Workbook is optional.

OVERVIEW:

Including a substantial review of STAT 361, this course will cover most of the standard techniques available for statistical inference. Techniques covered will include confidence intervals and hypothesis testing for both means and proportions, simple and multiple regression, analysis of variance, and Chi-square tests. Students should have successfully completed STAT 361 or the equivalent prior to enrolling in this course.

In theory, as undergraduate students in a business program, you are being trained to be entry level managers. As such you need to know how to interpret data for decision making purposes. The purpose of this class is not as much to turn you into statisticians as it is to turn you into intelligent consumers of statistics.

Most of the class meetings will be held in the assigned classroom. These class meetings will be conducted using a standard lecture format. In order to get the most out of these classes you should

Your homework must be well organized and legible. Show your work on problems involving complex calculations. Your job when doing the homework is to convince the grader (once again, me) that you know what you are doing. Late homework will be accepted but will be penalized by losing 25% for each class period that it is late.

EXAMS:

There will be three midterm exams, each of which will cover about one third of the course. The third midterm will be given late enough in the trimester so that no new material will be covered between the third midterm and the final exam. The final exam will be cumulative and will be equally weighted towards the entire trimester, i.e. one third of the final will be based on the material covered on the first midterm, one third will be based on material covered on the second midterm, and one third will be based on material covered on the third midterm.

You will be able to replace any one of your midterm scores with the score that you receive on the corresponding portion of the final exam. For instance, if you receive a 62 on the second midterm but score an 87 on that portion of the final, your midterm grade of 62 could be replaced with a score of 87. The midterm grade to be replaced, if any, will be chosen so as to provide you with the greatest benefit.

To help you prepare for the tests there are copies of exams from a previous trimester on reserve in the library (listed under "Parmenter"). The exams given during this trimester should be "fairly similar" to those given previously.

For each exam you will be allowed to use a one-page "cheat sheet." This means that you shouldn't waste any mental energy trying to memorize formulas (save your brain cells for trying to understand the concepts). You may include anything you want to include on your cheat sheet, e.g. formulas, definitions, example problems, prayer, etc. The only rule is that everything put on the sheet must be placed there by you by hand. This means no photocopying. I allow a cheat sheet rather than giving an open book exam because the act of putting the sheet together should force you to organize things in your mind. Most of the students who have taken this class from me would tell you that the effort put into creating a very thorough and well-organized cheat sheet is well rewarded. You will do much better on the exams.

STATISTICS TUTORING:

The Center for Learning Assistance in the Office of Student Development provides tutors free of charge to GSU students. The tutor for statistics is Chuck Roth. His office is in room B1215. He can be reached at 534-4508 or 534-5719. Call early to make an appointment as the tutors tend to get booked up, particularly toward the end of the trimester.

HOMEWORK LIST:

Homework is due on Thursday. Late homework will be accepted but will lose 25% for each full class period that it is late. If necessary you can mail homework to me at Dr. David Parmenter, College of Business, Governors State University, University Park, IL, 60466 or, as a last resort, fax it to me at (708) 534-8457.

Answers to the even numbered questions can be found in Appendix E (note: showing nothing more than the answer on your homework will not get you full credit). Answers to the self-test exercises can be found in Appendix F.

<u>Due date</u>	<u>Chapter</u>	<u>Problems</u>	<u>Special instructions</u>
5/23	5 6 7	35, 67, 72 19, 47, 53 59, 73	Pay close attention to 72d.
5/30	8	52, 58, 62, 68, 70	
6/6	9	1a, 3a, 7, 15, 16	On #7 give the <u>real world</u> consequences of making a Type I or Type II error.
6/13	9 12 13	22, 37, 46 16 56	Use Minitab on #56. Specify the hypotheses, the decision rule, and how the means differ, if at all.
6/20	14	9,10,26,28,35,61a	Do #9 and 28 by hand. Use Minitab on #10, 26, 35 and 61a. Specify the hypotheses, the decision rule and the conclusion when relevant. Whenever an answer is provided by Minitab, point out where the answer is found.
6.27	15 16	7, 22, 28a, 33, 34 1,15bc	Use Minitab on all problems. Specify hypotheses, the decision rule and the conclusion when relevant. Whenever an answer is provided by <i>Minitab</i> , point out where the answer is found.