

STAT 529: Data Analysis II

Spring 2006

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Office Hours: MW 2:30-3:30pm

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Office Hours: MW 12:30-1:30pm

Lecture Hours: MWF 1:30-2:18pm, Cockins Hall 312

Prerequisites: Statistics 528 or permission of the instructor.

Text: *The Statistical Sleuth – A Course in methods of data analysis*, Second Edition, by Ramsey and Schafer

Website: <http://stat.ohio-state.edu/~xinyi/stat529/index.html>

Many course materials will be made available here. These will include homework assignments and solutions, a select set of course handouts, in addition to any announcements that may need to be made.

Statistical Computing: This class requires you to use the statistical software package MINITAB. You can find it in many computer labs on campus. More details will be given in class.

Course Description:

Statistics 529 is the second course in a three quarter sequence in Data Analysis. We assume that students are familiar with organizing and summarizing data, the nature of relationships between variables, sampling distributions and the underlying rationale for hypothesis tests and confidence intervals. Statistics 529 and 530 will cover many of the common statistical methods that you will encounter when reading journal articles in your field, or that you will need to analyze data that you have collected. When covering any statistical method, our goal is for you to (1) understand the assumptions of the method and be able to check them, (2) be able to carry out the necessary computations on MINITAB, (3) be able to describe your results using correct statistical "jargon", and (4) be able to interpret the results in a way that is

meaningful to others in your field. We will try to accomplish these goals through homework and interactive classroom sessions. Core topics covered include: two-sample comparison, ANOVA (Analysis of Variance), and simple linear regression.

Grading:

Homework	20%
Midterm	35%
Comprehensive Final	45%

Homework:

Homework will be collected approximately weekly (making for about 7 homework assignments). Homework assignments and solutions will be posted on the course webpage. NO late homework will be accepted. A subset of problems from each assignment will be graded. Many of the analysis for the course will be done using MINITAB. When you put together your homework solutions, be sure to cut-and-paste so that the grader can follow your work. You may lose points if the grader has trouble following the thread of your solution.

Exams: There will be one midterm and one final exam.

Midterm (tentative): April 28, Friday, 1:30-2:18pm

Final: June 7, Wednesday, 1:30-3:18pm

- Both exams will be in-class, close-book; however, you will be allowed a formula sheet (2 sides of 8.5"×11" sheet of paper) and a calculator.
- There will be NO makeup exams. The only excuses for missing an exam are a serious illness or a major family crisis. Proof must be provided in the form of an official document. A note from a family member alone is not sufficient.
- You have until one week after receiving your grades on the exams to dispute the grade; the same applies to any homework grade. Note that when asking for a question to be re-graded, the entire assignment/exam may be re-graded, and so you run the risk of losing more points than you gain back.
- It is recommended that exams be done in pen. Use of pencil voids the students right to request a re-grade of the exam.

Academic Misconduct: Please help us to maintain an academic environment of mutual respect, fair treatment, and personal growth. You are expected to produce original and independent work for exams. Although students are often encouraged to work together on homework assignments, each student is to submit her/his own written work in her/his own words. Academic misconduct will not be tolerated and will be dealt with procedurally in accordance with University Rule 3335-31-02.

Note: Instructor reserves the right to make any changes considered academically advisable.