Fall Semester, 2012
Tuesday and Thursday: 1:30 pm - 2:45 pm
Location: Innovation Hall 222

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Office Hours: Monday 1:30 pm – 3:00 pm, Tuesday and Thursday 12:00 pm – 1:30 pm
Location: Engineering Building, Room 1716

Texts:


Note the websites for the books, where sample programs and datasets are available:
- Cody and Smith
- Delwiche and Slaughter

Description:

This course covers the basic skills needed for using computer packages in the statistical analysis of data. Topics include data entry, checking, and manipulation, as well as the use of statistical computer packages for basic univariate descriptive statistics, inference for univariate and bivariate data, regression analysis, and analysis of variance. The course will cover most of the material in Chapters 1-7, 9, 12-14, and 17 of Applied Statistics and the SAS Programming Language.

Specifically, this course will provide an introduction to SAS, one of the most widely used statistical software packages in industry and government, and will show how to use SAS to perform a variety of statistical analyses. It will give students an overview of SAS under MS Windows and provide
fundamental grounding in the DATA Step (used to access, structure, format, manipulate, and archive data) and some of the basic SAS statistical and graphical procedures.

Although this course specifically uses SAS, the basic skills introduced apply generally to other statistical software packages.

**Prerequisite:** STAT 250 or equivalent. (Elementary introduction to statistics including descriptive statistics, probability, estimation and hypothesis testing for (one and two) means and proportions. Statistical software used for assignments.)

**Class requirements:**

- **Lectures.** Lectures are critical for the understanding of the material. I will try to post lecture handouts in advance on [http://mymason.gmu.edu](http://mymason.gmu.edu). Some material and homework will not be from either textbook. Attendance to the class will be critical for successful performance in the course.

- **Homework.** Homework will be assigned weekly. One week will be given to finish the homework. Homework will be collected before class on the due date. **No late homework will be allowed except under very unusual circumstances.** You are encouraged to discuss homework problems with one another or work in groups. However, you should write your solutions independently. Duplicating others’ homework constitutes a violation of the university academic integrity policy.
  - The homework should be neat with the pages stapled together in the upper left corner. The problems should be in sequential order. Answers should be circled. Only paper copies will be accepted – no emails or faxes.
  - For each problem, unless otherwise indicated, turn in your answers to any posed questions, a copy of each SAS program submitted in a problem, a copy of the contents of the log window, and a copy of the contents of the output window that is associated with running your programs for that problem. Put your name in a title statement.
  - You must integrate the SAS programs, output (including any graphs), logs, and any written answers to questions from all problems into a single document. Do not turn in a separate document for each problem. (You may want to use the “copy and paste” features in MS Word to accomplish the required integration of material.) Unless otherwise indicated, you may edit out blank lines and page breaks at your discretion. Do not just attach separate sheets of computer output to the end of your assignment.
  - For each problem, unless otherwise specified, solve using a single SAS program. Do not write a separate program for part a, part b, etc.
  - Please use the data lines as formatted in the text, which you can either type in as shown in the text or copy/paste from the file indicated in the text that can be downloaded from the web site: www.prenhall.com/cody. Do not modify the data layout in raw data files; use any provided data files as given. When entering data directly, check and double-check the accuracy of your data entry and enter as specified in the problem.
  - Some of the problems refer to features not explicitly covered in class but are discussed in the required reading.

- **Lab session.** The tentative plan is to have a 15-20 minutes lab session at the end of every lecture. You will be given 2-3 problems. You are expected to work in groups to write appropriate SAS codes to solve these problems. **The answers to lab assignments should follow the same requirement for the homework.** Every group will submit their answers to the TA before the class ends.
• SAS.
  • Virtual Computing lab: [https://www.vcl.gmu.edu](https://www.vcl.gmu.edu); Instruction is provided in the following link: [http://doit.gmu.edu/staffSection.asp?page=vcl](http://doit.gmu.edu/staffSection.asp?page=vcl)
  • Version 9.2/9.3 available on campus in the Johnson Center 340, 341, and 343 computer labs and in Innovation Hall 301 lab
  • To load on personal PC, SAS version 9.2 can be licensed for one year for a small fee through Patriot Computers in the Johnson Center. Patriot Computers will be checking that student is registered in a statistics course using SAS so bring copy of your schedule. There is NO installation support available to the end user. (Note: Prior to leasing SAS, **make sure your computer meets the minimum system requirements.**)
  • We will be using mainly SAS and occasionally MS Excel for data manipulation.
  
  Also, we will be using MS Word (or another word processing package with similar capabilities) for homework assignments

**Grading:**

- 30% for homework assignments and lab assignments
- 30% for midterm exam
- 40% for final exam

*By GMU policy, any student who does not take the in-class final exam will receive a grade of 'S/A' (stopped attending), which becomes an F on their transcript, regardless of their points earned.*

**Additional Comments:**

- Put [STAT 362](mailto:STAT362@students.gmu.edu) in the subject line when you send me e-mail
- You are expected to familiarize yourself with the George Mason University honor code and abide by it
- **You are expected to take the exams during the designated time slot; Incompletes will not be granted** except under very unusual circumstances.
- If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474. All academic accommodations must be arranged through the ODS. [http://ods.gmu.edu](http://ods.gmu.edu)