Statistics 135 – Statistical Computing Software

Instructor: Dr. Mark Irwin   Office Hours: Monday 1:00 – 2:00,
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Objectives

An introduction to major statistics packages used in academics and industry (S-Plus/R, SAS). Will discuss data entry and manipulation, implementing standard analyses and graphics, exploratory data analysis, simulation based methods, computationally intensive statisticals methods, and programming new methods. Other packages may be discussed as time allows (LaTeX, Matlab most probable).

Prerequisites

Statistics 110 or 139 (may be taken concurrently) or by permission of instructor

Lectures

Monday, Wednesday, Friday, 10:00 – 11:00, Sever 102

Grading

Course grades will be determined by these components, with approximate weights as shown:

Homework	50 %
Midterm	20 %
Final	30 %

Both the midterm and final (assuming FAS approval) exams will be "take home" as they will involve significant computing

Suggested References:

S-Plus / R:

Venables WN and Ripley BD (2002). Modern Applied Statistics with S (4th edition), Springer. (Ordered by COOP)

Krause A and Olson M (2005). Basics of S-PLUS (4th edition), Springer. (Ordered by COOP)
An online version of the 3rd edition is available through the HOLLIS online catalog.

Venables WN and Ripley BD (2002). S Programming, Springer

SAS:

Delwiche, L.D. and Slaughter, S.J (2003). The Little SAS Book – A Primer (3rd edition), The SAS Insitute. (Ordered by COOP)

Cody R and Pass R (1995). SAS Programming by Example, The SAS Insitute

LaTeX:

Goossens M, Mittelbach F, and Samarin A (1994). The LaTeX Companion. Addison Wesley, Reading, MA.

Lamport L (1994). LaTeX: A document preparation system, 2nd edition. Addison Wesley, Reading, MA.

Many more references are available through the course web site.