Stat 544 Spring 2006

Instructor: Prof. Stephen Vardeman
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Course Web Page: http://www.public.iastate.edu/~vardeman/stat544/stat544.html

Textbook: Bayesian Data Analysis 2nd Edition by Gelman, Carlin, Stern, and Rubin

Other Useful Books: A list of a number of other useful Bayes books can be found on the course web page. All of the books on that list have been placed on reserve for the course in the Parks Library.

Class Schedule: 8-9:20 AM T/R 319 Snedecor Hall

Final Exam: 7:30-9:30 AM Tuesday May 2nd

Course Grading: Mid-Term Exam 20% (3/2/06 7-9 PM Location TBA)
                Final Exam 30% (5/2/06 7:30-9:30 AM Location TBA)
                Homework 10%
                Mini-Projects 20%
                Final Project 20%

Schedule: Vardeman expects to need to be out of town during the semester. In order to make up one class session for this eventuality, the 8 AM lecture on the day of the mid-term exam (March 2) will NOT be cancelled (unless so announced in class). If other make-ups are needed, those will be arranged during the term.

Software: We will use some mix of WinBUGS and R. If you have your own PC, these may be downloaded from http://www.mrc-bsu.cam.ac.uk/bugs/winbugs/contents.shtml and http://www.r-project.org/ respectively.

Assignments: Three kinds of assignments will be made (to be turned in):

  o From time to time, Vardeman will make some fairly "routine," very explicitly stated Homework exercises. These will be collected, and quickly skimmed for completeness, but not seriously marked.

  o A few (maybe 3-4?) more substantial/less well defined (but nevertheless not completely "free form") Bayes data analyses will be assigned and called Mini-Projects.

  o A Final Project will be self-selected by students and amount to some substantial non-standard Bayes analysis of a real data set taken from
some subject matter literature, a consulting project or other RA project, or some other real source. This will be written up in professional quality "tech report" style, and a short presentation given in class during the week before finals. (More details on what will be expected will follow.)

Individual students will prepare and turn in the **Homework** and **Mini-Projects**. You may discuss these assignments with fellow students. But each individual must do his or her own coding and independently write up his or her own assignments for turning in. **This is an integrity issue.** Do **not** copy what someone else has written and turn it in as your own. If some computations are needed, do **not** use someone else’s code. Each student will attach a cover sheet to his or her assignment with the following **written out, signed, and dated** in his or her own handwriting:

*I have neither given nor received unauthorized assistance on this assignment.*

The **Final Project** may be a collaboration among as many as 3 students. (You may choose to work alone if you prefer. If you work in a group more will be expected than if you do a solo project.) Your written report needs to conform to accepted US academic standards of proper attribution--you must properly reference any part of the report that is not completely your own, to avoid plagiarism. In this regard, please see the "USE INFORMATION ETHICALLY: Ethical / Legal Issues" sections of the web site [http://www.lib.iastate.edu/commons/guides/index.html](http://www.lib.iastate.edu/commons/guides/index.html) (in particular, the sections on plagiarism) and the Academic Dishonesty section of the ISU Catalog [http://www.iastate.edu/~catalog/2005-07/geninfo/dishonesty.html](http://www.iastate.edu/~catalog/2005-07/geninfo/dishonesty.html)

This is especially important if your first language is not English. You may not borrow any language directly from another source without proper attribution.

**Accommodation for Students with Disabilities**

Iowa State University compiles with the American with Disabilities Act and Sect 504 of the Rehabilitation Act.

If you have a disability and anticipate needing accommodations in this course, please contact Vardeman before the end of the 2nd week of the semester. Later requests for accommodations may not be honored. Anyone requesting an accommodation will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 of the Student Services Building.