STATISTICS 308 SYLLABUS
Fall 2010

Professor: Jeff Buzas

Office Hours: (Room 105, Mansfield House) Tuesday 2:30-3:30 p.m., Wednesday 10:30-11:30 a.m. and by appointment.

Phone: 656-2971

Class: Tuesday and Thursday 8:30-9:45 in 308 Lafayette. Please arrive to class ON TIME. Repeated tardiness will affect your grade.


Web page: http://www.cems.uvm.edu/buzas/buzas/st308/stat308.html

E-mail: buzas@cem.uvm.edu

Course Objective: This is an introductory course in statistics intended for graduate students. You will learn to analyze data and to understand and interpret statistical analyses. Many of the most common and useful statistical methodologies will be discussed, including contingency table analysis, nonparametric methods, multiple regression, ANOVA and sample size estimation. You will learn to apply these methods to data using a statistical software package, and how to interpret and present the results of your analyses, both written and orally. We will regularly discuss contemporary journal articles that employ statistical methods (specific subject matter to be chosen by students).

Grading: The course grade will be based 90% on homework assignments and 10% on class participation. Class participation means showing up for class and participating in class discussions. I often ask questions during lectures and I love to hear what students think, regardless of whether it is “right”. Also, I will sometimes ask for students’ ideas about how they solved the assignments.

In general, you are encouraged to work on the assignments in small groups of about three students. Statistics is by nature a cooperative enterprise. Statisticians act as experts in that field and advise clients (who are experts in their fields) on how to apply statistics to their problem. Working in groups helps foster this sort of cooperative attitude between students in the class. When turning in a group assignment, one paper is turned in for the group,
with everyone’s name at the top. Of course everyone who works in a group will contribute roughly equally to the final result. For example, in a programming assignment, each member of the group should attempt to program the problem, and the group should then try to work out differences (e.g., if different students in the group arrive at different results, the group should try to figure out why this is so, to locate the sources of the discrepancies and fix them; if no resolution can be found, then the students should turn in a paper that displays the several different attempts with a discussion explaining the group’s best understanding of the reasons for the discrepancy). Similarly, if a problem is worked and different members of the group obtain different answers, a similar resolution should be attempted, and if no agreement is obtained, the group should present a discussion. My role will be to examine what each group presents and comment on them, as well as to provide a grade.

Part of the homework will consist of analyzing data using SAS (Statistical Analysis System) software (or the software of your choice). SAS is available on the computers in Waterman and the library. Issues regarding use of the computer will be discussed in class.

Homework is due at the beginning of class. Late homework will not be accepted. Homework must be done on 8.5x11 paper and must be typed (excluding mathematics, but you can type math as well if you wish). Homework must be organized and multiple pages must be attached together using staples or paper clips. I may penalize sloppy work. Each homework must have header information in the following format.

Group member Names
STAT 308
September 12, 2010
Homework #2

Disabilities: If you are a student with an eligible disability and wish to receive individual accommodations it is your responsibility to explicitly notify me at least two weeks prior to any exam or quiz.

Religious Holidays: You, of course, have the right to practice the religion of your choice. Each semester you must submit in writing to me by the end of the second full week of classes your documented religious holiday schedule for the semester. Faculty must permit students who miss work for the purpose of religious observance to make up this work.