

## STAT 280: Elementary Applied Statistics

Time: MWF 1:00 pm – 1:50 pm  
Location: Duncan Hall 1070  
Course Text: *Introduction to the Practice of Statistics*, 5th ed., David S. Moore,  
George P. McCabe, W.H. Freeman and Co., c2003, ISBN: 2004114217

Instructor:

Dr. John A. Dobelman  
dobelman@stat.rice.edu

Duncan Hall 2077: 713 348 2695–or- JGSM 358: 713 348 5369

Office Hours: Negotiable. Wednesday/Friday 2-3 p.m.

Course Website:

[www.stat.rice.edu/~dobelman](http://www.stat.rice.edu/~dobelman) (see courses)

Course Description:

This course is designed to introduce the student to statistical methodology useful for data analysis. Emphasis will be placed on applications through working examples and computer-assisted data analysis in lab sessions.

Course Content: Chapters 1 – 9 of text plus special topics, Possible other real-life data project(s)

- Ch 1 graph, descriptive statistics, "normal" distribution
- Ch 2 bivariate data; scatterplot, correlation
- Ch 2 least squares regression, causation, data transformations
- Ch 3 experimental design, sampling, inference
- Ch 4 randomness, probability concepts and models
- Ch 4 random variables (r.v.'s), distribution moments (mean, variance)
  
- Ch 5 sampling distribution for counts and proportions
- Ch 5, 6 confidence, significance, statistical tests
- Ch 6, 7 power and inference
- Ch 7, 8 inference for populations
- Ch 8 comparing two populations
  
- Ch \_\_ time series
- Ch \_\_ categorical data analysis
- Ch \_\_ multivariate (multiple) regression and ANOVA
- Ch \_\_ special topic 4
- Ch \_\_ special topic 5

Grading: 50% assignments, 50% examination. Late policy: 20% penalty for HW turned in by next class; no credit for later than this.

Assignments (50%)

Homework: 20%  
Weekly Labs: 20%  
Project(s): 10%

Laboratory Sections: Sec. 1: Sunday 5-7

Sec. 2: Monday 7-9  
Sec. 3: Tuesday 3-5  
(see below)

Test/Quiz/Exam (50%)

Test 1: 15%

Test 2: 15%

Quizzes: \

Final Exam: / 20%

Laboratories:

Everyone is assigned to a particular lab session. Lab instructors will hold these sessions, and the weekly lab assignment is due by the end of the following week's session. Attendance at the lab sessions is not mandatory. You may complete the assignment on your own, as long as it is turned in (to your lab instructor) before the end of your assigned lab session. Labs more than 1 week late will NOT be accepted. If you find yourself working in a group for the labs, be sure to indicate ALL group members on your lab submission.

Lab instructors: See <http://www.stat.rice.edu/~dobelman/courses/280admin.txt>

Lab location: Gardiner Symonds Digital Teaching Center 2, Duncan Hall 1020 (Located outside the main Duncan Hall. Towards Keck Hall)

Symonds Workstation ID/Password:

Owlnet PC's require an Owlnet account with a PC/Mac password. Please obtain a CAMPUS PC PASSWORD prior to coming to the first lab. The PC/Mac password is not your normal Owlnet password (i.e. what you use to log into a UNIX machine or check your mail with); it is a special password which allows you to access Owlnet PC and Macintosh computers. If you don't have one or have forgotten it, you can go to <http://www.owlnet.rice.edu/webpcpasswd.shtml> to set/change it.

Attendance:

Students are expected to attend class. If a student misses a class, then he or she is responsible for keeping up with the course material and finding out if any exams, quizzes, or homeworks have been assigned or scheduled.

Disabilities:

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities should also contact Disability Support Services in the Ley Student Center.