

Applied Mathematics 165 Statistical Inference I

Updated Course Information & Problem Set II

Instructors: Donald McClure, Room 216, 182 George St, Telephone: X-31496, email: dem@dam.brown.edu. Office Hours: Tuesday 2:30-3:30 and Wednesday 2:30-3:30.

Lectures: Tuesday and Thursday, 1:00 - 2:20, BH168.

Teaching Assistants:

Mokshay Madiman, Room 004, 182 George Street, Tel: X-31992, email: mokshay@cfm.brown.edu

Tao Pang, Room 24, 182 George Street, Tel: X-33661, email: pang@cfm.brown.edu

Text: *Mathematical Statistics with Applications*, Sixth Edition, by Wackerly, Mendenhall and Scheaffer, Duxbury Press, 2001. AM165 covers approximately chapters 1 through 10.

Reading Assignment: Chapter 1 and Chapter 2, Sections 1 - 8.

Problem Sessions: There will be a weekly one-hour problem session run by a Teaching Assistant. Each member of the class will choose a section hour and corresponding TA. Session times are tentatively scheduled for:

Tuesday	4:10 – 5:00	Location TBA
Wednesday	12:00 - 12:50	Location TBA
Thursday	12:00 - 12:50	Location TBA

Problem Assignment Due ~~September 21~~September 24 by noon: To simplify the process of turning in homework and returning graded work, we have reserved space in a file cabinet in the kitchen at 182 George Street. You may turn in your work at Thursday's lecture or you can place it in the drawer marked for AM165 before noon on Friday. Sample solutions will be put on reserve at the SciLi and scanned copies will be posted on the course web page.

Section 2.5: pages 37-39: 18, 22, 23.

Section 2.6, pages 46-49: 27, 29, 31, 35, 37, 38, 39, 40, 44 & 50.

Exams: There will be two midterms in class. These are scheduled for *Thursday, October 11, and Tuesday, November 13*. (In the past—and we will do this again this year—the class has been offered the option of having the second midterm scheduled for the evening in order to reduce the time pressure associated with the short class hour.) Each midterm counts approximately 20% of the course grade. The final exam is scheduled for Wednesday, December 12 at 9:00am. The final counts for approximately 40% of the course grade. All exams are open-book, open-notes.

Brain Teaser aka “the Monte Hall Dilemma:” Think about this problem; it is not part of the regular assignment.

Suppose there are three doors, behind one of which is \$1,000,000 and behind the other two of which is a booby prize. You win what is behind the door of your choice. Imagine the following scenario. You pick door #1, but before it is opened, Monte gives you a clue; he tells you that there is a booby prize behind door #3 and that you may change your choice if you want to do so. Should you stick with your choice of door #1 or should you switch your pick to door #2?