

## BIostatistics 661 (Spring Semester, 2007)

### INSTRUCTOR:

Bahjat Qaqish

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Office Hours: TBD

### WEB SITE:

<ftp://ftp.bios.unc.edu/distrib/bios661>

### LECTURES:

Every Tuesday and Thursday, 12:30pm to 1:45pm, Room 1305, McGavran-Greenberg Hall.

### GRADING SCHEME:

i) MIDTERM EXAM (worth 30% of final grade; the midterm exam is scheduled for Saturday, March 3, 2007).

ii) FINAL EXAM (worth 50% of final grade; the official UNC time for the final is 4 PM, Thursday, May 3, 2007).

iii) HOMEWORK (worth 20% of final grade; there will be some homework assignments to be submitted for grading. These homework assignments are to be done INDEPENDENTLY of other students in the class; questions concerning these homework assignments should ONLY be addressed to the course instructor and to the course assistant.)

### COURSE ASSISTANT:

Kunthel By. The course assistant will be grading the homework assignments and will be offering a weekly tutoring session.

### REQUIRED TEXT:

Statistical Inference (Second Edition), Casella & Berger, Duxbury Press, Pacific Grove CA, 2002.

### OPTIONAL TEXTS:

Introduction to Mathematical Statistics (Fourth Edition), Hogg & Craig, MacMillan Publ. Co., New York, 1978.

Mathematical Statistics with Applications (Sixth Edition), Wackerly, Mendenhall, & Scheaffer, Duxbury Press, Pacific Grove CA, 2002.

### OTHER COURSE MATERIALS:

To be distributed in class or posted on the class website.

### COURSE PREREQUISITE:

A grade of L or better in Biostatistics 660, or permission of the instructor.

### PLAN:

The plan is to cover *roughly* chapters 5-10 of C&B (Casella & Berger), plus linear and logistic regression from chapters 11 and 12. Not all the material in C&B will be covered; some of the less essential sections will be skipped due to time constraints.

### SCHEDULE (approximate):

Preliminaries: 2 lecture

Chapter 5, Random Samples, 6 lectures

Chapter 6, Data Reduction, 4 lectures

Chapter 7, Point Estimation, 5 lectures  
Chapter 8, Hypothesis Testing, 4 lectures  
Chapter 9, Intervals, 4 lectures  
Chapter 10, Large Samples (Asymptotics), 2 lectures  
Chapter 11, Linear Regression, 1 lecture  
Chapter 12, Logistic Regression, 1 lecture