

ERSH 6300

Distance Education Class

University of Georgia

Spring 2003

Text: Moore (2000). The Basic Practice of Statistics, 2nd Edition. Freeman.

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Class Procedures: Students are expected to work through the assigned lessons and chapters in preparation for exams. Students will have access to class assignments, old exams and lecture materials through WebCT and a CD containing audio from past lectures. There are mandatory on-line discussion sessions each Wednesday from 7:30 to 8:30 in the evening. Feel free to call, e-mail, or drop by should you have questions. If I am not otherwise engaged, I will attempt to respond to your questions immediately. Otherwise, I will return your call or e-mail, or schedule a time to talk as soon as possible.

Grading: Grades will be assigned as a function of student performance on two examinations during the term and on the final examination. The two exams during the course of the semester will count 25% each and the final will be worth 50% of your final grade. To promote student learning, corrections will be encouraged on the two exams preceding the final with half of the points missed returned. Because my perspective on grading is that it should be based on what the student can demonstrate by the end of the course, anyone whose performance on the final alone would merit a more favorable evaluation will be assigned a grade based only on the final. All examinations are cumulative. Exams should be completed on time. Unless you make other arrangements beforehand, you should assume that late work counts as zero points and that the zero will be averaged with the other grades to form the final course grade.

Exams: The first two exams during the semester will be taken on your own time and should be mailed by the dates designated below. The exams will be posted on the web the week before they are due. The first exam will need to be postmarked by February 17 and covers Chapters 1, 2 and 3. The second exam will need to be postmarked by March 31 and will cover material through Chapter 7. The final exam will be on Saturday, May 10

and is to be taken at the university as an "in-class" final. It will be comprehensive and cover everything through Chapter 11. You are expected to work alone on these exams. You may use any of the tables in the text during the exams. Beyond that, you can use 'study guides' of your own making. For the first exam you may use 4 8.5 x 11 sheets of paper, for the second exam you may use 8 and for the final 16.

Grades will be assigned based on performance as follows:

Points Earned	Grade Assigned
90-100%	A
80-<90%	B
70-<80%	C
60-<70%	D
<60%	E

At the same time you turn in exams you must also submit your homework and a copy of your study guide. Please note that your texts have answers for each problem that I have assigned. As the homework is intended to help you in learning the basic concepts of statistics, please do refer to those answers after you have tried working the problems.

As the on-line discussion sessions to be held each Wednesday from 7:30-8:30 are required, anyone missing more than 2 of those sessions will have their final grade reduced by a full grade level.

Course Topics and Reading Assignments

Below you will find course topics and reading assignments that correspond with the book, and the lectures and notes available through WebCT. It is very important that you stay on top of things and don't let them pile up on you. Statistics takes time to learn and is not easily learned in cramming sessions.

Also, there are several lectures that touch on exams and the WebCT pages have copies of old exams available for you. The actual exams you will take will be somewhat different in content but will be similar in style to the ones discussed in the lectures and present on the WebCT pages.

Lecture Content

Chapters in Moore

Displaying Data	1
Descriptive Statistics for Data	1
Normal Distributions and Bivariate Distributions	1 & 2
Scatterplots, Correlations and Linear Regression	2
Practicalities and Cautions in Using Regression Models	2
Determining Characteristics of Normally Distributed Variables and Looking at Variable Association with Categorical Variables	2
Review for Exam 1 and Designing Research Studies	3
Review of Exam 1 and Continued Discussion of	3
Experimental Design	
EXAM 1 DUE: Must be post-marked by February 17	
Introduction to the Elements of Probability	4
Probability, Sampling Distributions, the Law of Large Numbers and the Central Limit Theorem	4
Confidence Intervals and Hypothesis Testing	6
Confidence Intervals and Hypothesis Testing	6 & 7
P Value and Fixed Alpha Strategies for Testing	7
Practical and Statistical Significance and an Introduction to Power Estimation	7
Estimation of Statistical Power	7
Review for Exam 2	
Review of Exam 2	
EXAM 2 DUE: Must be post-marked by March 31	
Proportions	8
More on Proportions and Means	8

Analysis of Relationships in Contingency Tables	9
One Way ANOVA	10
Statistical Inference in the Context of Regression Analysis	11
Questions Related to Regression and ANOVA	11
Review for Final	

FINAL: Saturday, May 10. Place to be announced.