

BOSTON COLLEGE
DEPARTMENT OF ECONOMICS

EC151
Fall 1997
T Th 12:00-1:15 PM

Joseph Quinn
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Office Hours: T 4:15-5:15, W 4:30-5:30

Kevin Cahill
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Office Hours: M 10:00-11:00, F 11:00-12:00

STATISTICS

This is an introductory course in statistics. The primary goal is to learn how to draw reasonable inferences about a population on the basis of a sample drawn from that population. The course has four sections, each more interesting than the prior one:

- 1) descriptive statistics
- 2) probability
- 3) statistical inference
 - estimation
 - hypothesis testing
- 4) regression analysis

The brief section on descriptive statistics will be a review for some of you. Probability theory is interesting in its own right, and is a necessary prerequisite for statistical inference, which is the heart of this course. We will end with a brief introduction to (and advertisement for) regression analysis, which is the primary statistical tool used by economists and many other social scientists, and is a logical and very valuable sequel to this statistics course. Students who enjoy and do well in EC151 should consider taking EC228, Econometrics, or MD384, Applied Statistics.

Textbooks:

- 1) Thomas Wonnacott and Ronald Wonnacott, Introductory Statistics for Business and Economics, John Wiley and Sons (4th edition). This text is available in the bookstore.
- 2) StataQuest, a software program from Duxbury/ITP. This is available in the bookstore in Windows and Mac formats, and will also be available at the O'Neill Computing Center.

Course Requirements:

The course meets three times per week, twice for lectures and once (on Friday or Monday) for a review session. There will be two in-class midterm exams (see dates below), a comprehensive final exam, eight problems sets (due in class on the dates noted) and five short in-class quizzes. The problem set and quiz dates are all shown on the syllabus.

Problem Sets:

The problem sets are essential to learning this material. I am going to experiment this semester with small study groups of 3 or 4 students, who will submit the problem set answers together, one copy per group. Learn from each other!

Attendance:

This course is hierarchical, with each section building on the prior ones. Therefore, it is a very bad idea to fall behind in statistics. Attendance is very highly recommended, as is serious effort on the problems sets.

Format:

Although I am prepared to lecture for 75 minutes, I urge students to answer and raise questions in class. You and your fellow students will profit if you do, and the classes will be much more interesting. If you are confused, so is at least half of the rest of the class. Do yourselves a favor, and let me know!

Grading Policy:

Problem Sets (8)	16%
Quizzes (best 4 of 5)	16%
Midterm I (Thursday, Oct. 9)	15%
Midterm II (Thursday, Nov. 20)	20%
Final Exam (Thursday, Dec. 18, 12:30 PM)	33%

There will be no make-up exams or quizzes, so pay close attention to the dates on the syllabus below. Put them on your social calendar now! Those who miss a midterm will have the weights on subsequent exams increased. The lowest of the 5 quiz grades will be dropped, so missing more than one is a bad idea. Submission of the problem sets will be noted, and credit based on the number your group hands in on time, but not on the grades you receive on them.

Academic Integrity:

I expect all students to do only their own work on quizzes and exams, and to contribute to the problems set answers.

SYLLABUS

<u>DATE</u>	<u>TOPIC</u>	<u>CHAP.</u>	<u>QUIZ</u> [chap.]	<u>PROBLEM SETS</u>		
				<u>OUT</u>	<u>DUE</u>	<u>BACK</u>
9/2	Introduction	1				
9/4	Descriptive statistics	2		PS1		
9/9	Descriptive statistics	2				
9/11	Probability	3		PS2	PS1	
9/16	Probability	3				PS1
9/18	Probability	3	Quiz 1 [2]			
9/23	Discrete random variables	4(1-3)		PS3		
9/25	Discrete random variables	4(1-3)			PS2	
9/30	Discrete random variables	4(1-3)				PS2
10/2	Continuous random variables	4(4-6)	Quiz 2 [3]	PS4	PS3	
10/7	Continuous random variables	4(4-6)				PS3
10/9	MIDTERM EXAM I	[1 - 4(1-3)]				
10/14	Two random variables	5				
10/16	Sampling	6		PS5	PS4	
10/21	Sampling	6				PS4
10/23	Point Estimation	7	Quiz 3 [4,5]		PS5	
10/28	Confidence Intervals	8		PS6		PS5
10/30	Confidence Intervals	8				
11/4	Confidence Intervals	8				
11/6	Hypothesis testing	9		PS7	PS6	
11/11	Hypothesis testing	9				PS6
11/13	Hypothesis testing	9	Quiz 4 [7,8]			
11/18	Hypothesis testing	9			PS7	
11/20	MIDTERM EXAM II	[4(4-6) - 8]				
11/25	Linear regression	11(1-2)		PS8		PS7
12/2	Linear regression	12	Quiz 5 [9]			
12/4	Linear regression	13(1-4)			PS8	
12/9	Review					PS8
5/3	FINAL EXAM Thursday, Dec. 18, 12:30 PM	[all]				

NAME:

YEAR: Fr. So. Jr. Sr.

LOCAL MAILING ADDRESS:

LOCAL PHONE NUMBER:

E-MAIL ADDRESS:

Each of you will be assigned to a discussion section, which will meet for 50 minutes on Monday or Friday each week. The primary purpose of these meetings is to discuss problem sets, although they can be used to raise any other questions or topics you would like to review.

Please list your preferences below, from 1 (first choice) to 4 (last).

Please put an (X) next to any time in which you have a course conflict.

We will post the times on Thursday.

_____ Monday 1:00 PM

_____ Monday 2:00 PM

_____ Friday 9:00 AM

_____ Friday 1:00 PM