

Draft: August 20, 2007
Administrative Details

1. Your grade in this class will be based on your performance on a midterm exam (25%), a final exam (30%), two projects (25%), and a series of exercises (20%).
2. The preceptor for this course is Jonathan Robinson. There will be weekly precepts. The time and location will be announced in class.
3. You may work in teams on the exercises. Teams should have four or fewer members, and each team should turn in only one assignment listing all team members' names. You may also work together on the statistical analysis for the projects. You may NOT work together on the project write-ups. Each of you must turn in your own write-up of the project. You may turn in exercises and projects early, but we will not accept late assignments.
4. My contact information is:
Office: Bendheim 321
Phone: 8-4811
Email: mwatson@princeton.edu
Secretary: Edna Loyd (Bendheim 318, 8-4911)
Office Hours: Thursday 3:00-4:00
5. The midterm examination will be a 3-hour self-administered examination. The exam will be available at noon on Thursday, 10/26. It must be turned in to me by Monday, 11/6. You may devote any (continuous) 3-hour period to the exam.

6. Important Dates:

Thursday, 10/26	Midterm Examination Distributed
Monday, 11/6	Midterm Examination Due
Tuesday, 11/7	Project 1 Distributed
Thursday, 12/7	Project 1 Due, Project 2 Distributed
Tuesday, 1/16/2007	Project 2 Due
TBA	Final Exam (Determined by WWS)

Reading List and Course Outline

There is one assigned text for the course:

(SW) Stock, James H. and Mark W. Watson, *Introduction to Econometrics*, 2nd Edition, (Addison-Wesley)

We will use this text in the second half of the semester. This text also contains an elementary discussion of some of the material that we will cover in the first half of the course.

During the first half of the semester you will find it useful to consult a good book on mathematical statistics. I have placed some good books on reserve in Wallace. (All of these book cover the same basic material. Use the one that you prefer.)

Wackerly, Dennis, William Mendenhall, and Richard Scheaffer, *Mathematical Statistics with Applications*, (6th Edition is most current), Duxbury

Hogg, R.V., A.T. Craig, and J.W. McKean *Introduction to Mathematical Statistics*, Prentice Hall (6th Edition)

Larsen, R.J. *Introduction to Mathematical Statistics and Its Applications*, Pearson.

Miller, I. and M. Miller, *John E. Freund's Mathematical Statistics* (6th Edition), Prentice Hall

Topics	Readings
Review: Summarizing Data, Descriptive Statistics	SW: Chapter 1
Probability, Conditional Probability, Probability Rules	Notes + Statistics Texts
Random Variables, Probability Distributions, Expectations	Notes + Statistics Texts SW(elementary coverage): Sections 2.1-2,4, Appendix 17.1
Sampling Theory and Design	Notes + Statistics Texts
The Sample Mean, the Law of Large Numbers and the Central Limit Theorem	Notes + Statistics Texts SW(elementary coverage): Sections 2.5-2.6, 3.1, Appendix 17.2
Estimators, Confidence Intervals, Hypothesis Tests	Notes + Statistics Texts SW(elementary coverage): Chapter 3.2-3.5
Program Evaluation with Randomized Controlled Experiments	SW: Chapter 13.2
Bivariate Regression	SW: Section 3.7, Chapters 4-5, Chapter 15
Multiple Regression	SW: Chapters 6-7
Nonlinearities and Choice of Functional Form	SW: Chapter 8
Regression with a Binary Dependent Variable	SW: Section 10.1
Assessing Studies based on Multiple Regression	SW: Chapter 9