

PRINCETON UNIVERSITY
Woodrow Wilson School
WWS507c
Mark Watson, Instructor

Administrative Details

1. Your grade in this class will be based on your performance on a midterm exam (20%), a final exam (35%), three projects (30%), and a series of exercises (15%).
2. The preceptor for this course is Giovanni Oppenheim. 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: Tim Waldron (Bendheim 216, 8-4143)
Office Hours: Thursday 2:30-4:00

6. Important Dates:

Thursday, 9/16	Project 1 Distributed
Thursday, 10/14	Project 1 Due
Thursday, 10/21	Midterm Examination
Tuesday, 11/2	Project 2 Distributed
Thursday, 12/2	Project 2 Due, Project 3 Distributed
Tuesday, 1/11/04	Project 3 Due

7. There is one assigned texts for the course:

(SW) Stock, James H. and Mark W. Watson, *Introduction to Econometrics*, 1st Edition, (Addison-Wesley)

We will use this text in the second half of the semester.

During the first half of the semester you may find it useful any good book on mathematical statistics. Some good examples that you will find on reserve in Wallace:

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

Hogg, R.V. and A.T. Craig, *Introduction to Mathematical Statistics* (5th Edition is the most current), Pearson

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

Reading List and Course Outline

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 15.1
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 15.2
Estimators, Confidence Intervals, Hypothesis Tests	Notes + Statistics Texts SW(elementary coverage): Chapter 3.2-3.5
Program Evaluation with Randomized Controlled Experiments	SW: Chapter 11.1-11.2, pages 385-386
Bivariate Regression	SW: Section 3.6, Chapter 4, Chapter 15
Multiple Regression	SW: Chapter 5
Nonlinearities and Choice of Functional Form	SW: Chapter 6
Regression with a Binary Dependent Variable	SW: Section 9.1
Assessing Studies based on Multiple Regression	SW: Chapter 7