Econometrics 120C

Required Text
James H. Stock and Mark W. Watson. Introduction to Econometrics. Addison-Wesley, 2002.

Topics and Readings
This is a course on econometric methods and their practical application. Data in economics and the social sciences come in a variety of forms such as cross-sections, panels and time-series and we will discuss each of these and the possibilities and problems they create in empirical studies. By the end of the course students should be skilled users of basic econometric methods and critical interpreters of empirical studies.

1. **Introduction and Review**
    a. Economic questions and data (Ch. 1, pp. 3-15)
    b. Estimation and testing with the linear regression model (Ch. 5, 142 – 185)
    c. Problems for regression analysis (Ch. 7.2, 245-254)
2. **Regression with Panel Data** (Ch. 8, 271 - 295)
    a. The two-period model (271 - 278)
    b. Fixed effects regression (278 – 283)
    c. Time fixed effects (283 - 290)
3. **Regression with a Binary Dependent Variable** (Ch. 9, 296 - 328)
    a. Linear probability model (291 – 302)
    b. Logit and probit models (302 – 309)
    c. Maximum likelihood estimation (309 – 322, 325 – 328)
4. **Instrumental Variables Regression** (Ch. 10, 331 - 366)
    a. The single instrument model (331 – 333)
    b. Two stage least squares estimation (333 – 348)
    c. Quality and validity of instruments (348 – 366)
5. **Introduction to Time Series Regression and Forecasting** (Ch. 12, 427 - 487)
    a. Basic concepts (427 – 438, 484 – 487)
    b. ARMA, ADL models (438 – 451)
    c. Model selection (451 – 457)
    d. Trends and random walks (457 – 467)
    e. Breaks (467 – 479)

Course Resources
Announcements regarding the course will be made on the course web page
        http://econ.ucsd.edu/faculty/atimmerm/econ120c/
You can also find course assignments, data and a copy of the course syllabus on this homepage.

Office Hours
The TAs for this course and their office hours will be announced at the beginning of class.
Professor Timmermann has regular office hours on Tuesdays 2-4pm in Econ 318.

Grading
Course requirements and grading weights are as follows:
        Problem sets: 20%
        Midterm Exams: 15% each (scheduled for Tuesday, October 22 and Tuesday, November 19)
        Final Exam: 50%