Carsten Holz
SOSC 534 Quantitative Analysis in the Social Sciences
Spring 2007, Sat 10:00 - 12:50, Room 4505
Office hours: Wednesday, 11-12noon, Room 3382
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Course website: http://teaching.ust.hk/~sosc534

We do not have a teaching assistant or instructional assistant for this course.

Course objectives

Introduction to quantitative methods used across social science disciplines, with a focus on linear regression analysis.

Requirements and grading

Grades are based on two examinations (midterm 22%, cumulative final 37%), at least eight assignments (16%), and a term paper (25%).

Assignments earn two percentage points each, up to a maximum of 16% of the final grade. You are free to cooperate with other students in answering the assignments, but everybody must write his/her own answers. A print-out of the output of statistical software is not acceptable as an answer.

Examination schedule:

Midterm exam	Saturday 31 March (in class)
Final exam	In examination period, as announced by the university
Term paper	Deadline: 30 May 2007, 12 noon

Textbook(s)

The one textbook in this course is Damodar GUJARATI, *Basic Econometrics*, fourth edition, McGraw-Hill, 2003. We cover Chapters 1-20. Depending on time and interest, we can also cover Chapters 21-22 (time series analysis), or principal components analysis/ factor analysis/ cluster analysis, or we can move further into categorical data analysis.

For principal components analysis, factor analysis, and cluster analysis (and other types of multivariate statistical methods), see Bryan F.J. Manly. *Multivariate Statistical Methods: A Primer*. Third edition. London: Chapman & Hall, 2005.

For details on categorical data analysis, see Alan Agresti. *An Introduction to Categorical Data Analysis*. New York: Wiley, 1996 (first edition).

Alternative / recommended readings

A more advanced (than Gujarati), comprehensive textbook is: Greene, William H. *Econometric Analysis*. Fifth edition. Upper Saddle River, NJ: Prentice Hall, 2003.

Cross section analysis only: Woolridge, Jeffrey M. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: The MIT Press, 2002.

Time series analysis only: Enders, Walter. *Applied Econometric Time Series*. Second edition. Hoboken, NJ: John Wiley & Sons, 2004.

General guide to econometrics (with explanations at all levels of difficulty): Kennedy, Peter. *A Guide to Econometrics*. Fifth edition. Cambridge, MA: The MIT Press, 2003.

Lecture schedule

(1) 3 February	Gujarati Appendix B (Matrix Algebra); Introduction; Chapters 1, 2
(2) 10 February	Gujarati Chapter(s) 3 (4)
(3) 24 February	Gujarati Chapters 4, 5 (6)
(4) 3 March	Gujarati Chapters 6, 7
(5) 10 March	Gujarati Chapters 7, 8
(6) 17 March	Gujarati Chapters 9, 10
(7) 24 March	Gujarati Chapter 11 / review
(8) 31 March	Exam, Gujarati Chapters 12
(9) 14 April	Gujarati Chapters 13, 14
(10) 21 April	Gujarati Chapters 15
(11) 28 April	Gujarati Chapters 16, 17
(12) 5 May	Gujarati Chapters 18, 19 (20)
(13) 12 May	Gujarati Chapter 20; Manly(?)

Software

If you know how to use STATA and want to continue to use STATA, do so. Otherwise, if you don't know STATA, I recommend EViews (easier and more intuitive).