Concordia University
Department of Economics

ECON 421/521: Econometrics I
Monday and Wednesday 16:15-17:30

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Office Hours: Tuesday and Thursday 10:00-12:00

Course Webpage: http://alcor.concordia.ca/~gospodin/teaching/421/421.html

Textbook: *Introductory Econometrics: A Modern Approach* by Jeffrey M. Wooldridge (fourth edition, 2009)

Grading: Assignments (4): 10%; Midterm Exam: 30%; Final Exam: 60%

Course Description

This course is an introduction to multiple regression techniques and hypothesis testing with cross-section and time series data. The focus of the course is on the linear regression model and the method of least squares. The objective is to help students develop an understanding and ability to apply the econometric methods to various economic policy and decision making problems. The course is designed to provide hands-on experience with observational data and computer software necessary to carry out an independent empirical project in economics.

The homework assignments will contain both analytical problems and computer exercises. The recommended software package for the data exercises is STATA. Intercooled STATA is installed in the Graduate Student Lab (H 1155-16) and the Arts and Science Learning Center (H-449). The course web site provides links to several STATA tutorials.

Course Outline

	Topic	Readings
Class 1	Introduction to Econometrics	Ch. 1
Classes 2-4	The Simple Regression Model	Ch. 2, Appendices B.2, B.4, C.2
Classes 5-7	Multiple Regression Analysis: Estimation	Ch. 3, Ch. 6.2-6.3, Ch. 9.1
Class 8	Multiple Regression Model in Matrix Form	Appendices D, E
Classes 9-10	Multiple Regression Analysis: Inference	Ch. 4, Appendices B.5, C.5-C.6
Class 11	OLS Asymptotics	Ch. 5, Appendix C.3
Class 12	Review	
October 26	**Midterm Exam**	
Classes 14-15	Regression Analysis with Binary Variables	Ch. 7, Ch. 17.1
Classes 16-17	Heteroskedasticity	Ch. 8
Classes 18-19	Endogeneity and Instrumental Variables	Ch. 9.2-9.4, Ch. 15.1-15.4
Classes 20-22	Time Series Regression Models	Ch. 10, Ch. 11.1-11.3
Classes 23-24	Serial Correlation	Ch. 12.1-12.4
Class 25	Review	