

Department of Economics Course Outline

Course: Economics 497 [Econometrics II]

Time: MWF 11:00-11:50 **Term:** Winter 2011

Instructor: Eugene Choo Section: 01

Office: SS 446 Place: MS 319

Office MW 2:00-3:00 E-Mail: echo@ucalgary.ca

Hours:

Textbook(s):

Required:

Wooldridge, Jeffrey M., Introductory Econometrics, Thomson, South Western, 4^{th} edition. (W)

Kennedy, Peter, A Guide to Econometrics, Blackwell, 6th edition. (K)

Book(s) on Reserve:

- (1) James H. Stock and Mark W. Watson, *Introduction to Econometrics*, Addison Wesley, 2003. **(SW)**
- (2) Wooldridge, Jeffrey M., *Introductory Econometrics*, Thomson, South Western, 4th edition. (**W**)
- (3) Kennedy, Peter, A Guide to Econometrics, Blackwell, 6th edition. (K)

Course Outline:

This course will focus on both the theory and application of econometric techniques. It extends the material covered in Econ 495, beginning with a matrix treatment of the linear model. It also looks at a number of non-linear estimation techniques like the maximum likelihood estimator and the general method of moment estimator. Examinations will include both theory and applied questions. The course will emphasize limited dependent variable models, panel data models, time series econometrics and an introduction to asymptotic theory.

Readings:

Prior to the start of Classes:

Review your Economics 395 and 495 notes. Review your knowledge of Matrix Algebra, (Alpha C. Chiang Fundamental Methods of Mathematical Economics, Chapters 4 and 5 is a good reference.) **Students are expected to be knowledgeable and capable in Stata.**

The main text for this course is Wooldridge. Additional material will be posted on Blackboard.

Week 1	Review the Linear Model, OLS and GLS –Assumptions, Matrix Representation of OLS and GLS, Chapters 3, 8, 9, 12
Week 2	The Geometry of OLS and GLS, Hypothesis Testing. Class notes
Week 3	Maximum Likelihood & Optimization Algorithm Chapters 5, Appendix C
Week 4	Limited Dependent Variable Models – Binomial and Multinomial Logit and Probit Chapters 17
Week 5	General Linear and Asymptotic Hypotheses Test – Wald, LM and LR Test Chapters 4
Week 6	Panel Data Chapters 13, 14

Midterm 1 on Friday, Feb 18 during classtime

Week 7-8	IV Estimation – Regression Discontinuity, Weak Instruments Class notes
Week 9-11	Time Series Econometrics – Univariate Time Series Model, ARIMA Modeling, Error Correction Models, Co-integration Chapters 10, 11
Week 12	Generalized Method of Moments and Non-Linear Least Squares Class notes

Additional reading material will be presented in class.

Grade Determination and Final Examination Details:

Five (5) Exercises	40%	
Midterm Exam	20%	February 18, 2011
Final Exam	40%	

Exercises, midterm and final exams are marked on a letter basis, and then converted to the Universities grade point value. The course grade is then calculated using the weights indicated above. As a guide to determining standing, these letter grade equivalences will apply:

A+	95 – 100	В	73 – 76	C-	60 - 62
A	85 – 94	B-	70 – 72	D+	56 – 59
A-	80 - 84	C+	67 – 69	D	50 – 55
B+	77 – 79	C	63 – 66	F	0 - 49

A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

Non-programmable calculators will be allowed during the writing of tests or final examinations.

There will be a Registrar scheduled final examination, lasting 2 hours and held in a classroom..

Tests and exams may involve multiple choice questions.

Students' Union Vice-President, Academic

Alyssa Stacy

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Students' Union Faculty Representative (Arts)

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Society of Undergraduates in Economics (S.U.E.)

E-mail: sue@ucalgary.ca www.ucalgary.ca/sue/

Notes:

- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor *within 15 days* of the work being returned to the class.
- It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

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Safewalk / Campus Security: 403-220-5333

Emergency Assembly Point: Social Science Food Court

EC 07-01-2011