

# **Department of Economics Course Outline**

Term: Winter 2007

01

Course: Economics 497 Section:

[Econometrics II]

Time: TR 15:30-16:45 Place: SA 124A

**Instructor:** Daniel V. Gordon

Office: SS 430 Telephone:

Office Hours: TR 11:00-12:00 E-Mail: dgordon@ucalgary.ca

## **Textbook(s):**

## Required:

Johnston, Jack and DiNardo, John, Econometric Methods, 4th, McGraw-Hill. (**JD**)

### **Book(s) on Reserve:**

- (1) Wooldridge, Jeffrey M., Introductory Econometrics, Thomson, South Western, 3rd edition. (W)
- (2) James H. Stock and Mark W. Watson, Introduction to Econometrics, Addison Wesley, 2003. (SW)

#### Course Outline:

This course will focus on both the theory and application of econometric techniques. Examinations will include both theory and applied questions. The least squares and maximum likelihood estimators will be the principal tools for model

estimation. Students will be introduced to the method of moments estimator. The course will emphasize model specification and validation, 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 an econometric software package like Stata, Shazam, TSP, Eviews, Rats or Limdep.

Class Readings: The main text for the course is JD. W and SW should be considered background or support readings.

Lecture 1 General Linear Model Chapters 1, 2, 3 (JD); 3, 9 (W); 5 (SW)

Lecture 2 General Linear Hypotheses Chapters 4 (JD); 4 (W); 5 (SW)

Lecture 3 Maximum Likelihood & Asymptotic Results Chapters 5 (JD); 5, Appendix C (W); 15, (SW)

Lecture 4 Heteroscedasticity & Autocorrelation Chapters 6 (JD); 8, 12 (W); 12 (SW)

Lecture 5 ARIMA Modelling Chapters 7 (JD)

Lecture 6 Time Series Econometrics Chapters 8 (JD); 10, 11 (W); 14 (SW)

Lecture 7 Systems of Equations Chapters 9 (JD); 15, 16 (W); 10 (SW)

Lecture 8 Generalized Method of Moments Chapters 10 (JD)

Lecture 9 Panel Data Chapters 12 (JD); 13, 14 (W); 8 (SW)

Lecture 10 Limited Dependent Variable Models Chapters 13 (JD); 17 (W) Additional and a distribution of the control of the

Three (3) Exercises*	30%	
Midterm Exam	30%	February 15, 2007
Final Exam	40%	

<sup>\*</sup> Exercises to be discussed in class.

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	В-	70 ? 72	D+	56 ? 59
A-	80 ? 84	C+	67 ? 69	D	50 ? 55
B+	77 ? 79	С	63 ? 66	F	0 ? 49

If, for some reason, the distribution of grades determined using the aforementioned conversion chart appears to be abnormal the instructor reserves the right to change the grade conversion chart if necessary to more fairly represent student achievement.

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.

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## **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.

Safewalk / Campus Security: 220-5333

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DVG:pst 2006-11-07