

## Economics 495(L01) Econometrics I

Instructor: Eugene Choo  
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Lecture Location: MS 217  
Lecture Days/Time: TR 14:00 – 15:15

Office: SS 446  
Office Hours: TBA

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### Textbook(s):

*Required:* Wooldridge, Jeffrey M., *Introductory Econometrics*, Thomson, South Western, latest edition.

### Book(s) on Reserve:

(1) *A Guide to Econometrics*, 6th Edition by Peter Kennedy, The MIT Press.

### Course Outline:

Econometrics combines Economic Theory, Statistics, and Mathematics. The primary objective of the course is to provide students with a solid theoretical and practical foundation for the interpretation of empirical evidence in economics. Besides focusing on econometric theory, students will also have “hands-on” experience working with economic data. This course will focus on the use of multi-variate linear regression model in cross sectional econometrics. Students will also be introduced to time-series, panel data and limited dependent variable models.

### Recommended Preparation:

Econ 495 starts at a level that assumes familiarity with the material covered in Econ 395 and Stats 213, including proficiency at mathematical statistics and some calculus. We make occasional, but limited, use of matrix algebra. While we review key results in class, students may find the textbook appendices provide a useful overview of the material. Students with weak math backgrounds will especially benefit by taking the recommended math courses.

**Desire2Learn:** This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <http://d2l.ucalgary.ca> using or through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. It is your responsibility to ensure that D2L uses the e-mail address of your choice. The default is your University of Calgary e-mail address.

The applied component to this course requires the use STATA software. Students are required to use STATA software on assignments, and should expect to be tested on basic coding and output. Computers in the Tri-Faculty computer lab (SS018) are equipped with STATA.

Week	Topic	Readings <sup>a)</sup>	
1	Review Statistics and Multiple Regression	Chapters 1 & 2, review Stats. 213 and Econ. 395, App B and C	Week 1 - Sep 8
2	Review multiple regression (Estimation and Inference)	Chapter 3 and 4	Week 2 - Sep 15 ( <b>Assn. 1 due</b> )
3	Multi-regression (Asymptotics and Other Issues)	Chapter 5 and 6	Week 2 - Sep 22
4	Dummy Variable Models	Chapter 7	Week 4 - Sept 29 ( <b>Assn. 2 due</b> )
5	Heteroskedasticity and Autocorrelation	Chapter 8 and 12	Week 5 - Oct 6
	<b>Midterm 1</b>	<b>Chapter 1 to 8 and 12</b>	<b>Tuesday Oct 14</b>
6	Misspecification	Chapter 9	Week 6 - Oct 13
7	Panel Data Techniques	Chapter 13	Week 7 - Oct 20 ( <b>Assn. 3 due</b> )
8	More Panel Data Techniques	Chapter 14	Week 8 - Oct 27
9	Time Series Models	Chapter 10 and 11	Week 9 - Nov 3 ( <b>Assn .4 due</b> )
10	Time Series Models	Chapter 12 and 18	Week 10 - Nov 10 (no class on Tues, Nov 11)
	<b>Midterm 2</b>	<b>Chapter 9 to 14, 18</b>	<b>Tuesday Nov 18</b>
11	Instrumental Variables	Chapter 24	Week 11 - Nov 17 (Assn. 5 due)
12	More Instrumental Variables	Assigned papers	Week 12 - Nov 24
13	Finish IV and Review	Assigned papers	Week 13 - Dec 1

Final examination scheduled by the Registrar's Office and held in a classroom.

<sup>a)</sup> All readings from Wooldridge

#### Grade Determination and Final Examination Details:

Five (5) Exercises @ 6% each	30%
Two (2) Midterm Exams @ 15% each*	30%
Final Exam	40%
	<u>100%</u>

The format and exact due dates of the assignments will be discussed during lectures. **Late assignments will not be accepted.** Unless otherwise specified, students are expected to be hand in written assignments individually.

Tests and final exams are marked on a numerical (percentage) basis, and then converted to letter grades. The course grade is then calculated using the weights indicated above. These letter grade equivalences will apply:

A+	95 – 100	B	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

Midterms are held during class lecture times. Students who are unable to write the midterm because of an illness, family emergency or religious observance will have the midterm weight shifted to the final examination. **Documentation MUST be provided within three business days after the midterm exam. Students should be aware that no "make-up" midterms will be given.**

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.

Students' Union Vice-President Academic:

Hana Kadri

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

[www.ucalgary.ca/sue](http://www.ucalgary.ca/sue)

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career partnerships with the Career Centre through hosting industry nights and information sessions, recognizing achievements in teaching, and organizing social events for members. Join now by contacting [sue@ucalgary.ca](mailto:sue@ucalgary.ca).

*Faculty of Arts Program Advising and Student Information Resources*

- Have a question, but not sure where to start? The new Faculty of Arts Student Centre (ASC) is your information resource for everything in Arts! Drop in at SS110, call us at 403-220-3580 or email us at [artsads@ucalgary.ca](mailto:artsads@ucalgary.ca). You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate> which has detailed information on common academic concerns.

- For program planning and advice, contact the Student Success Centre (formerly the Undergraduate programs Office) at (403) 220-5881 or visit them in their new space on the 3<sup>rd</sup> Floor of the Taylor Family Digital Library.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210-ROCK [7625] or visit them at the MacKimmie Library Block.

Safewalk / Campus Security: 220-5333  
Emergency Assembly Location – Social Sciences Food Court

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