

**ECO 2401 (Second Half)  
ECONOMETRICS II**

**Victor Aguirregabiria. Department of Economics. University of Toronto  
Winter 2014**

---

Instructor: Victor Aguirregabiria  
Office: 150 St. George Street, Room 309

Phone: 416-978-4358  
E-mail: [victor.aguirregabiria@utoronto.ca](mailto:victor.aguirregabiria@utoronto.ca)  
Web: <http://individual.utoronto.ca/vaguirre>

Class meetings: Mondays and Wednesdays 11am-1pm (GE 100).  
Office hours: Tuesdays and Thursdays 4:00-6:00pm

---

### **COURSE DESCRIPTION**

This second part of the course deals with econometric methods for the analysis of cross-sectional and panel data. The topics covered are linear panel data models, binary choice models, multinomial models, sample selection, and qualitative response models, limited dependent variable models, identification, and evaluation of treatment effects.

### **MEETINGS**

We will have two meetings per week on Mondays and Wednesdays at 11am-1pm in GE 100.

### **EVALUATION**

|              |     |                                         |
|--------------|-----|-----------------------------------------|
| Midterm Exam | 35% | Wednesday, February 12, 2014, 11am-1pm. |
| Term Paper   | 30% | Due date Thursday, March 27, 2014       |
| Final Exam   | 35% | Exam Period                             |

### **GENERAL REFERENCES**

- Amemiya, T. (1985): "Advanced Econometrics," Harvard University Press.
- Arellano, M. (2003): "Panel Data Econometrics," Oxford University Press.
- Cameron, C. and P. Trivedi (2005): "Microeconometrics: Methods and Applications," CUP.
- Maddala, G. S. (1983): "Limited-Dependent and Qualitative Variables in Econometrics," CUP.
- Manski, C. (2007): "Identification for Prediction and Decision," Harvard University Press.
- Pudney, S. (1989): "Modelling Individual Choice," Blackwell.
- Train, K. (2003): "Discrete Choice Methods with Simulation," CUP.
- Wooldridge, J. (2001): "Econometric analysis of cross section and panel data," MIT Press.

### **OUTLINE AND REFERENCES**

#### **Topic 1: Linear Panel Data Models**

##### References:

- \*\*\* Arellano (2003) chapters 2 to 7.
- Arellano, M. and B. Honoré (2004): "Panel Data Models: Some Recent Developments," Handbook of Econometrics. Chapter 53.
- \*\*\* Cameron and Trivedi (2005) chapters 21-22.

- Chamberlain, G. (1984): “Panel Data,” Handbook of Econometrics, Chapter 22.
- \*\*\* Wooldridge (2001) chapters 10-11.

## **Topic 2: Binary Choice Models**

### References:

- \*\*\* Amemiya (1985) chapter 9.
- Arellano, M. and B. Honoré (2004): “Panel Data Models: Some Recent Developments,” Handbook of Econometrics. Chapter 53.
- \*\*\* Cameron and Trivedi (2005) chapters 14 and 23.4.
- Maddala (1983) chapters 2 and 3.
- Manski (2007) chapter 13.
- \*\*\* McFadden, D. Handbook of Econometrics. Chapter 24. “Econometric Analysis of Qualitative Response Models.”
- \*\*\* Wooldridge (2001) chapter 15.

## **Topic 3: Multinomial Models**

### References:

- \*\*\* Amemiya (1985) chapter 9.
- \*\*\* Cameron and Trivedi (2005) chapter 55.
- Maddala (1983) chapter 5.
- \*\*\* Train (2003) chapters 1 to 10.

## **Topic 4: Tobit and Sample Selection Models**

### References:

- \*\*\* Amemiya (1985) chapter 10.
- \*\*\* Cameron and Trivedi (2005) chapter 16 and 23.5.
- \*\*\* Maddala (1983) chapters 6 to 9.
- \*\*\* Manski (2007) chapter 7.
- \*\*\* Wooldridge (2001) chapters 16 and 17.

## **Topic 5: Roy Model and Evaluation of Treatment Effects**

### References:

- \*\*\* Cameron and Trivedi (2005) chapter 25.
- \*\*\* Manski (2007) chapters 7, 9, and 10.
- \*\*\* Wooldridge (2001) chapter 18.

## SCHEDULE OF LECTURES

| <b>WEEK</b> | <b>DATE</b>                  | <b>TOPIC</b>                                                                                       |
|-------------|------------------------------|----------------------------------------------------------------------------------------------------|
| Week 8:     | Mon. Feb. 24<br>Wed. Feb. 26 | Linear Panel Data Models: Static models<br>Linear Panel Data Models: Static models                 |
| Week 9:     | Mon. Mar. 3<br>Wed. Mar. 5   | Linear Panel Data Models: Dynamic models<br>Linear Panel Data Models: Dynamic models               |
| Week 10:    | Mon. Mar. 10<br>Wed. Mar. 12 | Binary Choice Models<br>Binary Choice Models                                                       |
| Week 11:    | Mon. Mar. 17<br>Wed. Mar. 19 | Multinomial Models<br>Multinomial Models                                                           |
| Week 12:    | Mon. Mar. 24<br>Wed. Mar. 26 | Tobit and Sample Selection<br>Tobit and Sample Selection                                           |
| Week 13:    | Mon. Mar. 31<br>Wed. Apr. 2  | Roy's Model and Evaluation of Treatment Effects<br>Roy's Model and Evaluation of Treatment Effects |

---