

## Microeconometrics Schedule .

### Articles (supplementary):

Daron Acemoglu, Simon Johnson and James A. Robinson (2001). The Colonial Origins of Comparative Development: An Empirical Investigation, *The American Economic Review*, 91, 1369–1401.

David Albouy (2010). The Colonial Origins of Comparative Development: An Empirical Investigation: Comment. *Research Paper*

Yves Croissant. Estimation of multinomial logit models in R: The mlogit Packages.

Michael P. Murray, 2006. Invalid Instruments and Coping With Weak Instruments, *Journal of Economic Perspectives*, 20, 111–132.

Kenneth Train (2003). Discrete Choice Methods with Simulation. Chapter 6 Mlogit. [http://elsa.berkeley.edu/books/choice2nd/Ch06\\_p134-150.pdf](http://elsa.berkeley.edu/books/choice2nd/Ch06_p134-150.pdf).

Kenneth Train and Yves Croissant. Kenneth Trains exercises using the mlogit package for R.

### Assumed knowledge:

- Distribution functions for discrete and continuous processes
- Hypothesis testing (t-test, F-test)
- Joint, conditional and marginal distribution functions
- Expectation and conditional expectation
- Variance and conditional variance
- Matrix algebra
- OLS estimation
- Binary models
- Some level of programming to understand source code

It is assumed that you know how to solve and understand these problems.

Date	Topics	Readings
Week 36		
Trics Café	<ul style="list-style-type: none"> <li>• Problems</li> </ul>	
Lecture 1	<ul style="list-style-type: none"> <li>• Causal relationships and data types</li> <li>• Conditional expectation, partial effects</li> <li>• OLS estimator</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapters 2-4.</li> <li>• GB: Chapter 1-4.</li> </ul>
Week 37		
Trics Café	<ul style="list-style-type: none"> <li>• Problems</li> </ul>	
Lecture 2	<ul style="list-style-type: none"> <li>• OLS asymptotic properties</li> <li>• Heteroskedasticity robust inference</li> <li>• WLS estimator</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapters 2-4,5,9.</li> <li>• GB: Chapters 3,4.1-4.2</li> </ul>
Week 38		
Exercise 1	<ul style="list-style-type: none"> <li>• OLS and IV</li> <li>• Theory and practice</li> </ul>	
Lecture 3	<ul style="list-style-type: none"> <li>• Endogeneity</li> <li>• Proxy variables</li> <li>• Instrumental Variables</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapters 5,9,15.</li> <li>• GB: Chapters 4.3-4.4, 5.1</li> </ul>
Week 39		
Lecture 4	<ul style="list-style-type: none"> <li>• 2SLS</li> <li>• Testing overidentifying restrictions</li> <li>• Acemoglu <i>et al</i> (2001) by Thomas B. Andersen</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapters 5,9,15.</li> <li>• GB: Chapters 5.1, 5.2.6, 5.3, 6.3.2</li> <li>• Acemoglu <i>et al</i> (2001) and Albouy (2010)</li> </ul>

Date	Topics	Readings
Week 40 Exercise 2	<ul style="list-style-type: none"> <li>• 2SLS and IV</li> <li>• Theory and practice</li> </ul>	
Lecture 5 Friday 09-12 U151	<ul style="list-style-type: none"> <li>• Binary Response</li> <li>• Linear Probability Model</li> <li>• Generalised Linear Models: Probit and Logit</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapter 17.1.</li> <li>• GB: Chapters 15.1-15.3.</li> </ul>
Week 41 Lecture 6	<ul style="list-style-type: none"> <li>• Maximum Likelihood Estimation</li> <li>• Estimation of Probit and Logit</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapter 17.1.</li> <li>• GB: Chapters 13.1-13.7,15.4.</li> </ul>
<b>(Week 42) Potato Break</b>		
Week 43 Exercise 3	<ul style="list-style-type: none"> <li>• Binary Response Models</li> <li>• MLE</li> <li>• Theory and practice</li> </ul>	
Lecture 7	<ul style="list-style-type: none"> <li>• Reporting Results</li> <li>• The Binary Response Model Pitfalls</li> </ul>	<ul style="list-style-type: none"> <li>• UGB: Chapter 17.1.</li> <li>• GB: Chapters 15.5-15.7.</li> </ul>

Date	Topics	Readings
Week 44		
Lecture 8	<ul style="list-style-type: none"> <li>The Multinomial Response Models</li> </ul>	<ul style="list-style-type: none"> <li>GB: Chapters 16</li> </ul>
Week 45		
Lecture 9	<ul style="list-style-type: none"> <li>The Multinomial Response Model</li> </ul>	<ul style="list-style-type: none"> <li>GB: Chapters 16</li> <li>Train (2003)</li> </ul>
Week 46		
Exercise 4	<ul style="list-style-type: none"> <li>The Multinomial Response Models</li> </ul>	
Week 46		
Lecture 10	<ul style="list-style-type: none"> <li>Censored Regression Model</li> </ul>	<ul style="list-style-type: none"> <li>UGB: Chapter 17.2.</li> <li>GB: Chapters 17.1-17.5.</li> </ul>
Week 47		
(Week 47)	<b>Partial Exam</b> <ul style="list-style-type: none"> <li>OLS, 2SLS, Binary and Multinomial Response Models</li> <li>25% of final grade</li> </ul>	<b>Terminalrum 8-9</b> <ul style="list-style-type: none"> <li>Monday, 18th November at 10 am.</li> <li>3 hours</li> </ul>
Week 47		
Exercise 5	<ul style="list-style-type: none"> <li>Censored Regression Model</li> </ul>	
Lecture 11	<ul style="list-style-type: none"> <li>Panel Data Linear Models</li> </ul>	<ul style="list-style-type: none"> <li>UGB: Chapter 13,14.</li> <li>GB: Chapters 7.8, 10</li> </ul>
Week 48		
Lecture 12	<ul style="list-style-type: none"> <li>Panel Data Linear Models</li> <li>Seminar by Morten S. Pedersen in Panel Data Models</li> </ul>	<ul style="list-style-type: none"> <li>UGB: Chapters 13,14.</li> <li>GB: Chapters 7.8, 10</li> </ul>

Date	Topics	Readings
Week 49		
Exercise 6	• Panel Data Linear Models	
Lecture 13	• Sample Selection	<ul style="list-style-type: none"> <li>• UGB: Chapter 17.5.</li> <li>• GB: Chapters 19.1-19.7.</li> </ul>
Week 50		
Exercise 7	• Sample Selection	
Lecture 14		
Wed. 12-15		
U152	• Sample Selection	• GB: Chapter 19.1-19.7.
Week 51		
Lecture 15		
Monday 10h-13h		
U151	• Questions and answers	
(Week 51)	<b>Partial Exam</b> <ul style="list-style-type: none"> <li>• Censored Regression, Panel Data and Sample Selection</li> <li>• 25% of final grade</li> </ul>	Terminalrum 8-9 <ul style="list-style-type: none"> <li>• Wednesday, 18th December at 10 am.</li> <li>• 3 hours</li> </ul>
<b>Christmas Holidays</b>		
January	<b>Take home exam</b> <ul style="list-style-type: none"> <li>• The whole syllabus</li> <li>• 50% of final grade</li> </ul>	One week