

HE204B/HE2005 – Principles of Econometrics**2014/2015 Semester 1**

This course offers students in economics and mathematics a firm foundation in the theory and methods of econometrics. The course teaches students the main tools of estimation and inference. Applications of econometric techniques will be illustrated by empirical examples based on economic analysis. In addition, further topics such as goodness-of-fit, prediction, dummy variables, heteroskedasticity, functional form misspecification, time series data will be discussed.

Teaching Faculty

	<u>Office</u>	<u>Telephone</u>	<u>E-mail</u>
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Office Hours: Tue 5-6 pm, Wed 12.30 -1.30 pm, Thurs 3.40 - 4.20 pm

Prerequisite: HE1005 or MAS215 or MTH214 or MH2500

Textbook* and Recommended References

[1] *Wooldridge, Jeffrey (2013), *Introductory Econometrics: A Modern Approach* (5th edition) (Library Call#: HB139.W913I)

[2] Hill, Rufus et al. (2011), *Principles of Econometrics* (4th edition) (Library Call# HB139.H647P 2011)

[3] Gujarati, Damodar and D. Porter (2010), *Essentials of Econometrics* (4th edition) (Library Call#: HB139.G969E 2010)

Method of Instruction

Lectures: 100 minutes per week (Lectures commence in Week 1 and end in Week 13)

Tutorials: 50 minutes per week (Tutorials commence in Week 2 and end in Week 14)

Course Assessment

Your grade on this course will be based on four components.

Participation:	10%
Problem Sets:	10%
In-class Quizzes:	15%
Final Examination:	65% (<i>Closed-book</i> Exam on November 26, 2014)
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TOTAL:	100%

Proposed Lecture Schedule

Week No	Topics #	Reading
1	THE NATURE OF ECONOMETRICS AND ECONOMICS DATA	Ch 1
2	THE SIMPLE REGRESSION MODEL	Ch 2
3	MULTIPLE REGRESSION ANALYSIS: ESTIMATION	Ch 3
4	MULTIPLE REGRESSION ANALYSIS: INFERENCE	Ch 4
5	MULTIPLE REGRESSION ANALYSIS: OLS ASYMPTOTICS	Ch 5
6	MULTIPLE REGRESSION ANALYSIS: FURTHER ISSUES	Ch 6
7	MULTIPLE REGRESSION ANALYSIS WITH QUALITATIVE INFORMATION: BINARY (OR DUMMY) VARIABLES	Ch 7
8	RECESS	
9	HETEROSKEDASTICITY	Ch 8
10	MORE ON SPECIFICATION AND DATA ISSUES	Ch 9
11	INSTRUMENTAL VARIABLE ESTIMATION	Ch 15
12 & 13	REGRESSION ANALYSIS WITH TIME SERIES DATA	Ch 10 & 11

I reserve the right to change the content if it is in the best interest of student-learning.