

City University of Hong Kong

Information on a Course offered by the Department of Economics and Finance with effect from Sem A, 2012 / 2013

Part I

Course Title: Topics in Econometrics

Course Code: EF8075

Course Duration: 1 semester (39 hours)

Credit Units: 3

Level: R8

Medium of Instruction: English

Prerequisites: EF5470 or equivalent

Precursors: Nil

Equivalent Courses: EF5408 Topics in Econometrics

Exclusive Courses: *(Course Code and Title)* Nil

Part II

Course Aims

This course aims at providing an in-depth analysis of various advanced theoretical results in econometrics, including asymptotic distribution theory, instrumental variable methods, panel data analysis, discrete choice modeling, and topics in time series econometrics. Students will apply these techniques and concepts to real life cases and examine the usefulness of various economic and finance models. By engaging in these exercises, students further strengthen their discovery skills.

Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	derive the theoretical results covered in this course	60%
2.	apply the econometric methods covered in this course to real world data; Students will solve real-world problems by using econometric software. Empirical applications focus on the underlying economic rationale and their mathematical interpretations.	40%

Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	TLAs	Hours/week (if applicable)
CILO 1	Lectures, in-class discussions, assignments	3 hours lecture per week
CILO 2	Lectures, in-class discussions, assignments	3 hours lecture per week

Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	Type of Assessment Tasks/Activities	Weighting (if applicable)	Remarks
CILO 1 - 2	Individual project, homework assignments, discussions	100%	

Summary of how DEC is incorporated in Assessment Tasks, and Teaching and Learning Activities (TLAs)

DEC Elements	Assessment Tasks and TLAs
Develop students' attitude to discover and innovate	Lecture In-class discussion
Develop students' abilities to discover and innovate, accomplishments of Discovery and Innovation	Homework Assignment
Accomplishments of Discovery and Innovation	Individual project

Grading of Student Achievement:

Letter Grade	Grade Points	Grade Definitions	Remarks
A+	4.3	Excellent	Strong evidence of firm grasp of the subject knowledge and achieving the stated CILOs; Students have demonstrated very strong overall ability to discover and innovate, and showed very strong evidence of accomplishments of discovery.
A	4.0		
A-	3.7		
B+	3.3	Good	Sufficient evidence of achieving the stated CILOs; Students have demonstrated strong overall ability to discover and innovate, and showed strong evidence of accomplishments of discovery.
B	3.0		
B-	2.7		
C+	2.3	Adequate	Some evidence of achieving the stated

C C-	2.0 1.7		CILOs; Students have demonstrated some ability to discover and innovate, and showed satisfactory evidence of accomplishments of discovery.
D	1.0	Marginal	Marginal familiarity with the subject knowledge; Students have demonstrated marginal ability to discover and innovate, and showed marginal evidence of accomplishments of discovery.
F	0.0	Failure	Little evidence of familiarity with the subject knowledge; Students have demonstrated little evidence of ability to discover and innovate, and showed little evidence of accomplishments of discovery.

Part III

Keyword Syllabus

Matrix algebra; Mathematical statistics; Asymptotic distribution theory; Instrumental variables; Generalized method of moments; Maximum likelihood; Panel data; Dynamic panel regression; Discrete choice model; Forecast comparison and evaluation; Volatilities; Unit roots; Cointegration

Recommended Reading

Text(s)

Cameron, A.C. and Trivedi, P.K. (2005) *Microeconometrics*. Cambridge University Press.

Greene, W. *Econometric Analysis*. Current Edition. Prentice-Hall.

Hamilton, J. (1994) *Time Series Analysis*, Princeton University Press.

Hayashi, F. (2000) *Econometrics*, Princeton University Press.

Hsiao, C. (2003) *Analysis of Panel Data*. 2nd edition. Cambridge University Press.

Wooldridge, J. (2001) *Econometric Analysis of Cross Section and Panel Data*, MIT Press.