



### 1. General Information

Course Subject	ECON
Course Number	2280
Course Title	Introductory Econometrics
Academic Years	2023-2024
Grading Method	Letter

### 2. Instructors

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### 4. Course Description

Course Description	Econometrics is the branch of economics that formulates regression models to analyze social science and business data. The objective of this course is to prepare students for basic knowledge of carrying out data analysis using econometric models. The course will cover regression model formulation and estimation, and using these models to test hypotheses and make forecasts. Both cross sectional and time series regression models are covered.
Prerequisites	ECON1210 Introductory microeconomics; and  ECON1280 Analysis of economic data or STAT1601 Elementary statistical methods or STAT1602 Business statistics or STAT1603 Introductory statistics or STAT2601 Probability & statistics I or STAT2901 Probability & statistics: Foundations of Actuarial Science
Mutually exclusive	STAT3614 Business Forecasting STAT3907 Linear models and Forecasting
Free Elective	Yes

## 5. Course Objectives

1. To acquire and internalize knowledge of statistical methods used by economists.
2. To apply these methods in a variety of real world data (e.g. microeconomics, macroeconomics, business, government policies, etc.)
3. To interpret and explain regression results to end users.

## 6. Faculty Learning Goals

Goal 1: Acquisition and internalization of knowledge of the programme discipline

Goal 2: Application and integration of knowledge

Goal 3: Inculcating professionalism

Goal 4: Developing global outlook

Goal 5: Mastering communication skills

Goal 6: Cultivating leadership

## 7. Course Learning Outcomes

Course Teaching and Learning Activities	Aligned Faculty Learning Goals					
	1	2	3	4	5	6
CLO1. Formulate regression models to describe the economic relationship among variables.	✓	✓				
CLO2. Understand the desirable properties of estimators.	✓	✓				
CLO3. Estimate and test hypotheses about underlying economic relations.	✓	✓	✓			
CLO4. Understand the implications for estimation results under classical linear model assumptions and the consequences of their violations.	✓	✓				
CLO5. Apply econometric software and statistic tables to conduct regression analyses.	✓	✓				
CLO6. Interpret and explain regression outputs.			✓		✓	

## 8. Course Teaching and Learning Activities

Course Teaching and Learning Activities #	Expected Study Hours	Study Load (% of study)
T&L1. Lectures	36	27.7
T&L2. Tutorials	12	9.2
T&L3. Assignments	22	16.9
T&L4. Self-study	60	46.2
	Total: 130	Total: 100

## 9. Assessment Methods

Assessment Methods	Description	Weight %	Aligned Course Learning Outcomes
A1. Assignments		20%	1,2,3,4,5,6
A2. Midterm Exam		30%	1,2,3,4,5,6
A3. Final Exam		50%	1,2,3,4,5,6

## Assessment Rubrics

A1. Assignments	
A+,A,A-	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+,B,B-	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+,C,C-	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis.
D+,D	Evidence of basic familiarity with the subject.
F	Little evidence of basic familiarity with the subject.
A2. Midterm Exam	
A+,A,A-	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+,B,B-	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+,C,C-	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis.
D+,D	Evidence of basic familiarity with the subject.
F	Little evidence of basic familiarity with the subject.
A3. Final Exam	
A+,A,A-	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+,B,B-	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+,C,C-	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis.
D+,D	Evidence of basic familiarity with the subject.
F	Little evidence of basic familiarity with the subject.

## 10. Course Grade Descriptors

A+,A,A-	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+,B,B-	Strong evidence of the ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+,C,C-	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis.
D+,D	Evidence of basic familiarity with the subject.
F	Little evidence of basic familiarity with the subject.

## 11. Course Content and Tentative Teaching Schedule

Topic/ Session	Date	Content	Readings	Other information
		Nature of Econometrics and Economic Data	Chapter 1	Core topics
		The Simple Regression Model	Chapter 2	Core topics
		Multiple Regression Analysis: Estimation	Chapter 3	Core topics
		Multiple Regression Analysis: Inference	Chapter 4	Core topics
		Multiple Regression: Further Issues	Chapter 6	Core topics
		Regression Analysis with Qualitative Information	Chapter 7	Core topics
		Heteroskedasticity	Chapter 8	Core topics
		Basic Regression Analysis with Time Series	Chapter 10	Core Topics
		Multiple Regression Analysis: OLS Asymptotics (optional)	Chapter 5	Optional topics
		More on Specification and Data Issues	Chapter 9	Optional topics
		Further Issues in Using OLS with Time Series Data (optional)	Chapter 11	Optional topics
		Serial Correlation and Heteroskedasticity (optional)	Chapter 12	Optional topics

## 12. Required/Recommended Readings & Online Materials

Textbook	<p><b>Required Textbook:</b></p> <p><b>Introductory Econometrics: A Modern Approach</b>, Wooldridge, Jeffrey M (2020), 7th edition, Asia edition, Cengage Learning.</p> <ul style="list-style-type: none"><li>• With permission from the publisher, the datasets and student solution manual of the textbook will be posted in our course's Moodle page (as zip file).</li><li>• It is your responsibility to acquire the 7th edition of the textbook. The instructor and TA are prohibited from uploading end-of-the-chapter questions in Moodle due to copyright restrictions.</li><li>• The 6th and 7th editions are quite similar except that some, but not many, topics are rearranged and the 7th edition has a few more end-of-the-chapter questions. The old questions follow the same order in both editions. Editions older than the 6th are not recommended.</li><li>• Two copies of the textbook are put on three-hour reserve in the Main Library.</li></ul>
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## 13. Means / Processes for Student feedback on Course

✓	Conducting mid-term survey in addition to SETL around the end of the semester
	Online response via Moodle site
✓	Others
	Consultation hours

## 14. Course Policy

1. Weekly lecture PPT file will be posted on Moodle before each class. Please download and print them out before the lecture.

2. Tutorials start in the third week of class. Tutorial questions will be posted on Moodle one week in advance.

- The TA will get in touch with you about scheduling the time slots.
- You are expected to come to the tutorials fully prepared, i.e. you have already worked out the problem set before the tutorials. The tutorials are dedicated to working out problems and discussing concepts.

3. Assignments: **All assignments must be typed.** This is a course policy that applies to all subclasses in both semesters. Please learn how to use Microsoft Word Equation Editor or other software to type equations.

### 4. Econometric software:

We will use STATA to run regression in this course. The TA will teach you how to use STATA during tutorials. STATA can be accessed in our computer lab KKL1104 or online via JupyterHub network. The TA will teach you how to use STATA and how to access it through JupyterHub.1

Note: Knowledge of STATA commands is not required. But you are expected to know how to read standard regression outputs generated by STATA.

### 5. Midterm examination policy

(a) No supplementary midterm exam will be given. If you have a legitimate reason for missing the midterm, its weight will be added to the final exam. The only acceptable reasons are sickness and time clash with other midterm exams.

(b) If you cannot attend the midterm exam, you must inform the instructor or TA in person or via email, phone call or voice message *before* the exam starts. You must provide a medical certificate to verify that you have sought treatment *prior* to the exam and you are unfit to take it.

6 Classroom etiquette: Be a considerate and mature person. Please observe the following good practices.

- Use of mobile phone for any purposes is strictly prohibited. Remember to turn it off.
- Come to class and return from the break on time.
- If you have to leave the class early, please inform the instructor beforehand and sit close to the exit to minimize disruption caused when you leave.
- Stay attentive and do not disturb your classmates.

### 7. Academic Conduct

The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: <http://www.hku.hk/plagiarism/>

Academic dishonesty is behavior in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

a. Plagiarism - The representation of someone else's ideas as if they are one's own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be acknowledged.

## 14. Course Policy

b. Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one's own when in fact it is the result of a joint effort. Where a candidate for a degree or other award uses the work of another person or persons without due acknowledgement:

- (1) The relevant Board of Examiners may impose a penalty in relation to the seriousness of the offence;
- (2) The relevant Board of Examiners may report the candidate to the Senate, where there is prima facie evidence of an intention to deceive and where sanctions beyond those in (1) might be invoked.

**Plagiarism will automatically result in at least a zero score in the plagiarized assignment or examination. Serious cases will be referred to the University's Disciplinary Committee.**