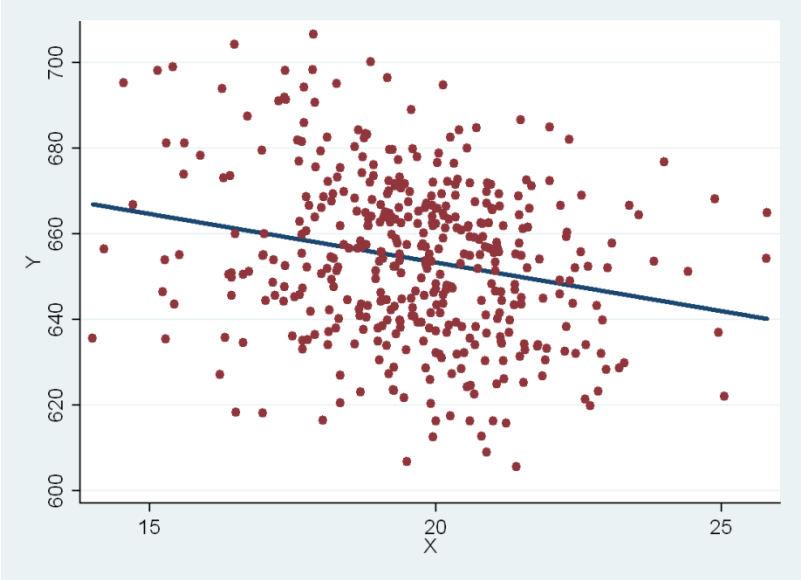
EC3303: Econometrics I

Syllabus and Course Logistics



Kelvin Seah

AY 2022/2023, Semester 1

Outline

- Course syllabus and organisation
- Introduction to Econometrics

Syllabus and Course Logistics

- **Lecturer:** Kelvin Seah
- **E-mail:** ecsskck@nus.edu.sg
- **Consultation Hours:** Fridays 4-6pm, or by appointment
- **Main prerequisites:**

Probability, statistics, and basic calculus (EC2303)

How Course will be Conducted

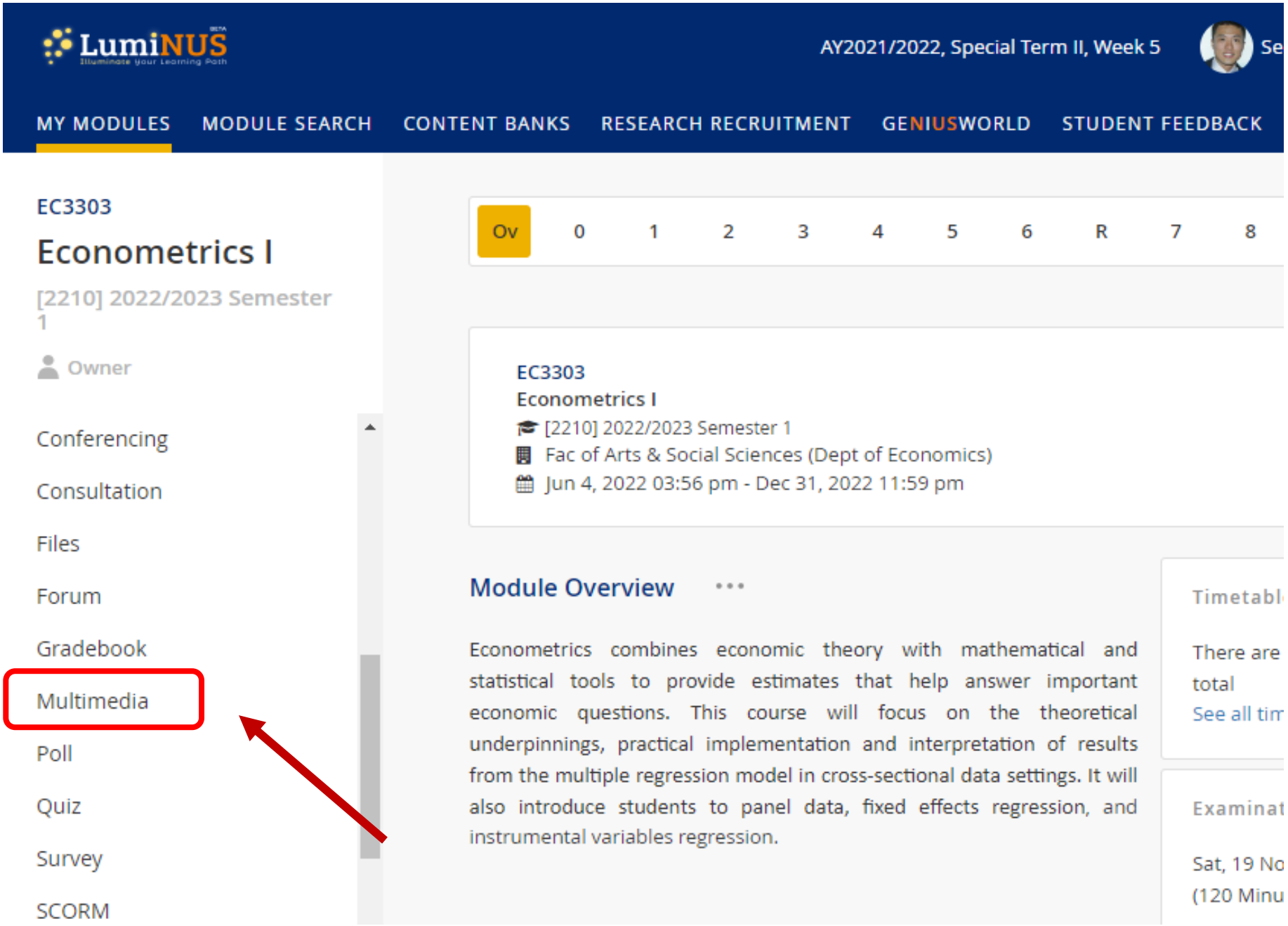
- EC3303 has been selected for NUS' Blended Learning 2.0 (BL 2.0) initiative.
- Embrace a blend of E-learning and in-person instruction.
- Modes of Instruction
  - **Lectures: Online (E-learning)**
  - **Tutorials: In Person**

How Course will be Conducted (contd)

Lectures

- Format: Online (E-learning)
- A recorded lecture will be posted every Wednesday on LumiNUS
- Can watch the lecture at your own convenience through the "Multimedia" tab on LumiNUS (click on the module "EC3303" → then on the left panel, under "Tools" → click on "Multimedia")

*As we are exploring the use of different modes of lecture presentation for subsequent semesters, in two of the weeks (tentatively weeks 4 and 5), instead of the usual recorded lecture, we will use a recorded webcast. A poll will then be conducted to explore which mode of presentation students prefer. More details will be announced closer to the date.


LumiNUS
AY2021/2022, Special Term II, Week 5
MY MODULES
MODULE SEARCH
CONTENT BANKS
RESEARCH RECRUITMENT
GENIUSWORLD
STUDENT FEEDBACK
EC3303
Econometrics I
[2210] 2022/2023 Semester 1
Owner
Conferencing
Consultation
Files
Forum
Gradebook
Multimedia
Poll
Quiz
Survey
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EC3303
Econometrics I
[2210] 2022/2023 Semester 1
Fac of Arts & Social Sciences (Dept of Economics)
Jun 4, 2022 03:56 pm - Dec 31, 2022 11:59 pm
Module Overview
Econometrics combines economic theory with mathematical and statistical tools to provide estimates that help answer important economic questions. This course will focus on the theoretical underpinnings, practical implementation and interpretation of results from the multiple regression model in cross-sectional data settings. It will also introduce students to panel data, fixed effects regression, and instrumental variables regression.

Tutorials

- Format: In person
- Tutorials will take place in venue: AS4-0110

Tutorial (TW)	Day	Start	End	Venue
TD1	Mon	10:00	12:00	AS4-0110
TD2	Tue	10:00	12:00	AS4-0110
TD3	Wed	10:00	12:00	AS4-0110
TD4	Thu	10:00	12:00	AS4-0110
TD5	Fri	10:00	12:00	AS4-0110
TD6	Mon	14:00	16:00	AS4-0110
TD7	Tue	14:00	16:00	AS4-0110
TD8	Thu	14:00	16:00	AS4-0110
TE1	Mon	10:00	12:00	AS4-0110
TE2	Tue	10:00	12:00	AS4-0110
TE3	Wed	10:00	12:00	AS4-0110
TE4	Thu	10:00	12:00	AS4-0110
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- Start in Week 3 or 4 (depending on the tutorial slot you have signed up for).
- Run once every 2 weeks in 2-hour slots (5 tutorials in total)
- Groups D run on odd weeks & Groups E on even
  - Groups D 1-8 will start the first class in week 3 (wk 3, 5, 7, 9, 11).
  - E.g. Groups E 1-7 will start the first class in week 4 (wk 4, 6, 8, 10, 12).
- Academic calendar

https://nus.edu.sg/registrar/docs/info/calendar/ay2022-2023.pdf

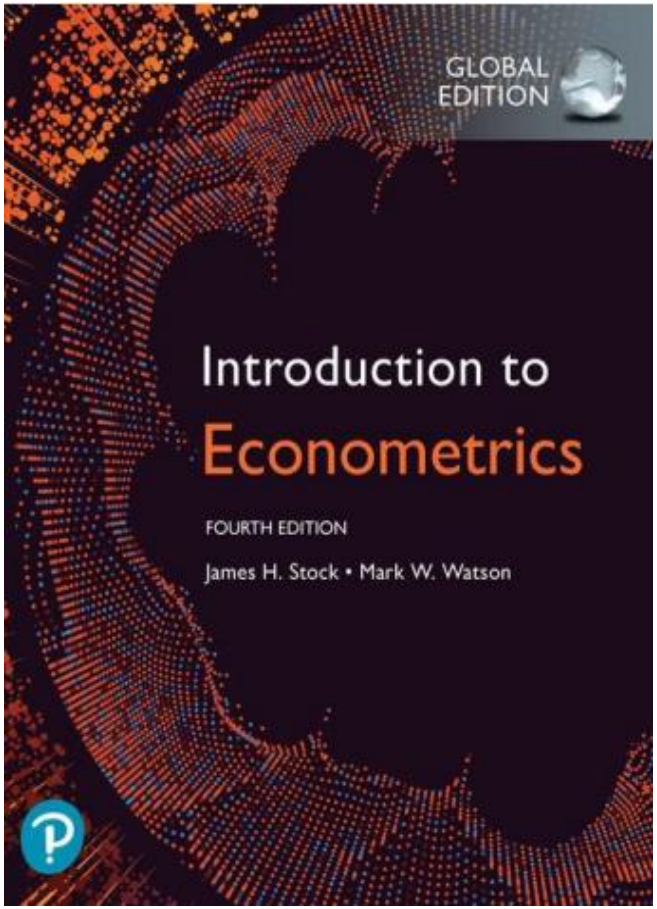
SEMESTER 1

Mini Semester		Week	Dates		
		0	*Mon, 1 Aug 2022*	~	*Sat, 6 Aug 2022*
Mini Sem 1A: 8 weeks	*Instructional Period (6 weeks)*	1	Mon, 8 Aug 2022	~	Fri, 12 Aug 2022
		2	Mon, 15 Aug 2022	~	Fri, 19 Aug 2022
		3	Mon, 22 Aug 2022	~	Fri, 26 Aug 2022
		4	Mon, 29 Aug 2022	~	Fri, 2 Sep 2022
		5	Mon, 5 Sep 2022	~	Fri, 9 Sep 2022
		6	Mon, 12 Sep 2022	~	Fri, 16 Sep 2022
	Reading		*Sat, 17 Sep 2022*	~	*Sun, 25 Sep 2022*
	Examination	7	Mon, 26 Sep 2022	~	Sat, 1 Oct 2022
Mini Sem 1B: 9 weeks	*Instructional Period (6 weeks)*	8	Mon, 3 Oct 2022	~	Fri, 7 Oct 2022
		9	Mon, 10 Oct 2022	~	Fri, 14 Oct 2022
		10	Mon, 17 Oct 2022	~	Fri, 21 Oct 2022
		11	Mon, 24 Oct 2022	~	Fri, 28 Oct 2022
		12	Mon, 31 Oct 2022	~	Fri, 4 Nov 2022
		13	Mon, 7 Nov 2022	~	Fri, 11 Nov 2022
	Reading		*Sat, 12 Nov 2022*	~	*Fri, 18 Nov 2022*
	Examination (2 weeks)		*Sat, 19 Nov 2022*	~	*Sat, 3 Dec 2022*

EC3303 Textbook

Introduction to Econometrics: Fourth Edition, Global Edition

Author	: James H. Stock and Mark M. Watson
Publisher	: Pearson
ISBN	: 9781292264455



Available now at NUS Co-op @ Forum.

Textbook Website (3rd Edition)

http://wps.pearsoned.co.uk/ema_ge_stock_ieupdate_3/251/64413/16489878.cw/index.html

- Datasets
- Self-assessment quizzes
- Solutions to odd-numbered exercises

Assessment

- **Tutorial:** **10%**
- **2 E-Homework:** **30%**
- **Midterm:** **20%**
- **Final:** **40%**

E-Homework (30%)

- 2 individual-based homework assignments (each 15%)
- Assignments will have both analytical and empirical problems.
- Homework 1 is due on Friday of **week 7** (**September 30th**)
  Homework 2 is due on Friday of **week 13** (**November 11th**)
- Students will have 3 days to complete each homework assignment.
- Details of Homework 1 will be announced in week 6.

Midterm (20%) & Final (40%)

- Aim: To examine your broad, cumulative, understanding of the material
- **Midterm**: Wednesday, 5 October, 2pm-4pm
- **Final**: Saturday, 19 November, 9am-11am
- Please keep these dates & times free
- What is on these assessments?
  - (Only) material discussed in class; cumulative
  - Questions will be similar to those asked in the tutorial problem sets and homework.

Tutorial Participation (10%)

- **Tutorials**
  - Attendance (5%)
  - Presenting answers and participating (5%)

What will we cover in the tutorials?

- Reinforce material taught in the lectures by working on analytical questions (~ 30 mins).
- Learn how to analyze data using STATA software (~ 1 hr).
- Students can access Stata both using the computers in the tutorial room, as well as virtually.
  - More details will be provided in week 2 on how you can access Stata virtually.

We Are Here to Help

If you have any questions regarding the class material, please:

1. Post your questions in the LumiNUS discussion forum

2. Visit me during consultation hours or schedule an appointment with me

- Consultation Zoom Meeting (every Friday, 4-6pm)
- https://nus-sg.zoom.us/j/83502944248?pwd=K2c1WENobVBXV0YrcEliUlh4Z2s5dz09
- Meeting ID: 835 0294 4248
- Passcode: 714459

Date	Topic	Chapters (Stock and Watson)	Supplementary Material	Chapters (Stock and Watson)
Week 1	Introduction and Overview	SW: Ch. 1	Review of Statistics	SW: Ch. 2,3
Week 2	Bivariate Linear Regression (I)	SW: Ch. 4		
Week 3	Bivariate Linear Regression (II)	SW: Ch. 4,5		
Week 4	Bivariate Linear Regression (III)	SW: Ch. 5		
Week 5	Multiple Regression (I)	SW: Ch. 6		
Week 6	Multiple Regression (II)	SW: Ch. 6,7		
Recess Week				
Week 7	Multiple Regression (III)	SW: Ch. 7		
Week 8	**Midterm Test: October 5th (Wed), 2-4pm** **(No lecture this week)**			
Week 9	Nonlinear Regression Functions (I)	SW: Ch. 8		
Week 10	Nonlinear Regression Functions (II)	SW: Ch. 8		
Week 11	Fixed Effects Regression	SW: Ch. 10		
Week 12	Instrumental Variables Regression	SW: Ch. 12		
Week 13	Assessment of Regression-based Studies and Conclusion	SW: Ch. 9		
Reading Week				
	Final Exam: November 19th (Sat), 9-11am			