ECON301: ECONOMETRICS 1 (Semester I 2020)
Department of Economics, Korea University

Course Description

The aim of this course is to equip students with a good understanding of econometric methods that are widely used in empirical work in economics and other related disciplines.

Requirement

Students are required to have basic knowledge on economics and statistics.

Topics

No	Topic	Chapters in Text 1	Chapters in Text 2
1	Introduction and statistical review	1	1
2	Simple linear regression model	2	2.1, 6.1, 6.2
3	OLS estimation	3	2.2–2.4
4	Statistical properties of OLS	4	2.5, 4.1
5	Hypotheses testing for simple linear regression models	5, 6	4.2, 4.3
6	Large sample properties	7	5.1, 5.2
	Midterm test		
7	Multiple linear regression (interpretation, OLS estimation)	8	3.1, 3.2, 6.3
8	Statistical properties of OLS	9	3.3–3.6, 4.1
9	Hypotheses testing (single restriction, multiple restrictions)	10	4.4–4.6
10	Prediction	11	6.4
11	Non-normality	12	5
12	Heteroskedasticity (OLS, robust inferences, WLS)	13	8
13	Autocorrelation (cluster robust inferences)	14	10–12
14	Endogeneity and instrumental variable estimation	15	15
	Final examination		

Learning Resources

Text 1: Chirok Han, *Lectures on Econometrics* (in Korean) 3rd, 2019, Pak Young Sa; *or*
Text 2: Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*, 7e (or 6e or 5e), Cengage Learning (Korean translation available for Part I).

Assessment

The final grade will be assessed based on the following:
Assignments 5%, Midterm test 35%, Final exam 60%.

Contact

Professor Chirok Han (chirokhan@korea.ac.kr; ext. 2205; PSE 428)
Office Hours: To be announced.