科目名	上級計量経済学特殊講義Ｉ	科目名/Subject	Advanced Econometrics(Special Lectures)I
担当教員	ＫＯ　ＩＡＴ　ＭＥＮＧ	担当教員/Instructor	KO IAT MENG
曜日・講時	水曜2限		
対象学年	3･4		
科目ナンバリング	EAL-ECO366E		
単位数	2単位		
メディア授業科目			
主要授業科目			
授業の目的と概要	This course is one-semester advanced level econometrics. The prerequisites are Econometrics I and II. This course should be regarded as the entry level econometrics course for PhD program. Students are required to complete the two courses before enrolling in this one. In this course, we will study econometrics in greater depth with both old topics (such as linear regression) and new topics (such as panel data model). Mathematical tools, for example, vector and matrix, are extensively used in deriving estimations and inferences. Random sample (independence) is assumed in most of the topics. Dependent sample will be covered in Advanced Econometrics II.		
学修の到達目標	The students are expected to have a much deeper understanding of modern econometrics. The topics covered in this course are essential for rigorous economic research either empirically or theoretically.		
授業内容・方法と進度予定	Conditional Expectation and Projection (Hansen Chapter 2 & 3; Hong Chapter 2; Wooldridge Chapter 2) - Conditional Expectation - Best predictor under MSE criteria - Linear projection and Least Squares Estimator - Correct model specification Single-Equation Linear Model (Hansen Chapter 4–7, 9; Hong Chapter 3–4; Wooldridge Chapter 3–4) - Classical linear regression models: OLS and MLE - Large sample linear regression models: OLS and Method of Moment - Hypothesis testing Single-Equation Linear Model with Instrumental Variables Estimation (Hansen Chapter 12 & 13; Wooldridge Chapter 5) - Generalized method of moment under i.i.d. - Two-stage least squares estimation Multiple-Equation Model (Hansen Chapter 11; Wooldridge Chapter 7) - Seemingly Unrelated Regressions: OLS and GLS Linear Unobserved Effects Panel Data Models (Hansen Section 17.1–17.27; Wooldridge Chapter 10) - FD, FE, RE methods		
実務・実践的授業			
使用言語	English		
成績評価方法	Assignments (40%) Mid-term exam (30%) Final exam (30%)		

教科書および参考書

書名	著者名	出版社	出版年	ISBN/ISSN	資料種別
Econometrics	Hansen, Bruce E.		2022		
Foundations of Modern Econometrics: A Unified Approach	Hong, Yongmiao	World Scientific Pub Co.	2020		
Econometric Analysis of Cross Section and Panel Data	Wooldridge, Jeffrey M.	MIT Press.	2002		

関連ＵＲＬ	Google Classroom: hoa3fmo
授業時間外学修	It is recommended that students have completed Econometrics I and II and have a basic understanding of linear algebra, probability theory, and statistical inference. Reviewing key concepts in regression analysis and matrix operations before the course will be helpful.
添付ファイル	
その他	Lecture slides will be distributed. No single textbook will be exactly followed. Selected chapters from different textbooks will be listed as reading materials.
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１単位の授業科目は、４５時間の学修を必要とする内容をもって構成することを標準としています。１単位の修得に必要となる学修時間の目安は、「講義・演習」については１５～３０時間の授業および授業時間外学修（予習・復習など）３０～１５時間、「実験、実習及び実技」については３０～４５時間の授業および授業時間外学修（予習・復習など）１５～０時間です。