シラバス参照

科目名	Econometrics I
科目名/Subject	Econometrics I
担当教員	KO IAT MENG
担当教員/Instructor	KO IAT MENG
曜日・講時/Day/Period	前期 火曜日 2講時
対象学年 /Eligible Participants	1年／1year
科目ナンバリング /Course Numbering	EEM-ECO564E
単位数/Credit(s)	2
メディア授業科目 /Course of Media Class	

授業の目的と概要 /Object and summary of class	This course is a one-semester introduction to probability theory and statistics for economists. The course will cover fundamental knowledge of probability and statistics for the preparation of subsequent econometrics courses. Simple R programs will be used and taught.
学修の到達目標 /Goal of study	The students are expected to have a deep understanding of probability and statistics, especially in conducting economic data analysis. Good command of knowledge covered in this course will also facilitate studying other economic courses.
授業内容・方法と進度予定 /Contents and progress schedule of the class	Foundation of Probability (Hansen Chapter 1) - Random outcomes and events - Probability measure - Conditional probability and independence Random Variables and Univariate Distributions (Hansen Chapter 2) - Random variables: discrete & continuous - Distribution functions - Moments Important Parametric Distributions (Hansen Chapter 3 & 5) - Discrete distributions - Continuous distributions Random Vectors and Multivariate Distributions (Hansen Chapter 4 & 5) - Joint distributions - Conditional distributions - Independence and correlation - Conditional expectation Sampling Theory and Statistics (Hansen Chapter 6) - Population, random sample, and statistics - Sampling distribution of statistics Law of Large Numbers and Central Limit Theory (Hansen Chapter 7 & 8) - Asymptotic limits & LLN - Convergence in distribution & CLT Parameter estimation and evaluation (Hansen Chapter 10 & 11) - Population and distribution model - Maximum likelihood estimation - (Generalized) Method of Moments - Mean squared error and best unbiased estimators Hypothesis Testing (Hansen Chapter 13) - Hypothesis testing related concepts Note: We may not be able to cover all topics due to time constraints. The contents will be adjusted accordingly.
実務・実践的授業 /Practical business ※〇は、実務・実践的授業であることを示す。 /Note:”〇” Indicates the practical business	

使用言語 /Language Used in Course	English
成績評価方法 /Evaluation method	Assignments (40%) Mid-term exam (30%) Final exam (30%)
教科書および参考書 /Textbook and references	(see table below)
関連URL /URL	Google Classroom: bdv36v6
授業時間外学修 /Preparation and Review	
添付ファイル /Attached File	
その他 /In addition	The author's earlier draft of the book will be uploaded on google classroom.
更新日付 /Last Update	2023/02/28 16:24

No	書名	著者名	出版社	出版年	ISBN/ISSN	資料種別
1.	『Probability and Statistics for Economists.』	Hansen, Bruce E.		2022		

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時間に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。
One-credit courses require 45 hours of study. In lecture and exercise-based classes, one credit consists of 15-30 hours of class time and 30-15 hours of preparation and review outside od class. In laboratory, practical skill classes, one credit consists of 30-45 hours of class time and 15-0 hours of preparation and review outside of class.