COURSE MAPPING FORM
(For mapping 1 PU course to 1 NUS BBA course)

SAMPLE

I. STUDENT DETAILS

Student ID	A7654321Z
SEP Semester	AY2024/2025 Semester 2
SEP University	Norwegian School of Economics

II. COURSE DETAIL

	Partner University	**NUS**
Course Code	ECN402	DBA4712
Course Title	Econometrics	Causal Analytics for Managerial Decisions
Course Unit	7.5 ECTS	4 Units
Pre-Requisite	(recommended) basic knowledge in statistics	DAO1704 & DBA3803
Have you met the pre-requisite(s) for the NUS course	(For Non-Business School students) ☐ Yes – please provide NUS Unofficial Transcript ☐ No – please do not submit mapping proposal	
Full Course Details	This course introduces regression analysis in the context of cross-sectional data, panel data, and time-series data. Students will learn key techniques such as instrumental variables and differences-in-differences to address endogeneity problems. The focus is on applying econometric methods to real-world empirical and policy-relevant problems using practical examples. Topics Covered: • Simple and multiple regression models • Causality, correlation, and potential outcomes • Panel data methods and differences-in-differences • Time-series analysis • Instrumental variable techniques Knowledge Outcomes Upon completion, students will be able to: • Recognize assumptions underlying econometric models • Identify necessary assumptions for interpreting causal effects in policy and decision-making • Describe core econometric concepts and terminology Skills Outcomes Upon completion, students will be able to: • Interpret empirical analysis results • Select appropriate regression models and control variables • Assess causal claims and differentiate causation from correlation • Conduct multivariate quantitative analysis • Use STATA or R for reproducible econometric work, including data import, table generation, and visualization • Choose and apply the appropriate research methods for a given question	

General Competence
Upon completion, students will be able to:

- Interpret and critically evaluate empirical econometric studies
- Understand the structure and requirements of a master's thesis, including formulating research questions
- Reflect on ethical considerations in data collection, storage, and use
- Demonstrate a solid foundation for more advanced econometric courses

Weekly Topics Covered

Part 1: Introduction & Basic Econometrics

Date	Session	Topic	Textbook
14 Jan	1	Introduction	-
16 Jan	2	Causality & Experimental Design	Joshua D. Angrist and Jörn-Steffen Pischke Chapter 1
21 Jan	LAB0	Introduction to R, practice	-
23 Jan	LAB0	Introduction to R, practice	-
28 Jan	3	The Simple Regression Model	Jeffrey M. Woolridge Chapter 2
30 Jan	4	Multiple Regression Model: Estimation	Jeffrey M. Woolridge Chapter 3
4 Feb	5	Multiple Regression Model: Inference	Jeffrey M. Woolridge Chapters 4, 5
6 Feb	6	Qualitative Info & Heteroskedasticity	Jeffrey M. Woolridge Chapter 7, Joshua D. Angrist and Jörn-Steffen Pischke Chapter 2 Appendix
11 Feb	LAB1	Cross-Sectional Analysis	
13 Feb	LAB1	Cross-Sectional Analysis (Deadline for LAB1 (submission of R code & regression results write-up): Feb 18)	

Part 2: Further Topics

Date	Session	Topic	Textbook
18 Feb	7	Instrumental Variables I	Joshua D. Angrist and Jörn-Steffen Pischke Chapter 3
20 Feb	8	Instrumental Variables II	Joshua D. Angrist and Jörn-Steffen Pischke Chapter 3, Jeffrey M. Woolridge Chapters 15.1–15.3
25 Feb	LAB2	Instrumental Variables	-
27 Feb	LAB2	Instrumental Variables (Deadline for LAB2 (submission of R code & regression results write-up): Mar 4)	

	4 Mar	9	Pooled Cross Sections & Basic Panel Data	Jeffrey M. Woolridge Chapters 13, 14
	6 Mar	10	Advanced Panel Data Methods	Jeffrey M. Woolridge Chapter 14, AP Chapter 5
	11 Mar	11	Time Series Models and Processes	Jeffrey M. Woolridge Chapters 10, 11.1–11.3
	13 Mar	12	Trends, Seasonality & Autocorrelation	Jeffrey M. Woolridge Chapters 11.3, 12.1–12.5
	18 Mar	LAB3	Time Series & Panel Data	-
	20 Mar	LAB3	Time Series & Panel Data (Deadline for LAB3 (submission of R code & regression results write-up): Mar 25)	-
	25 Mar	13	Empirical Work & Master Thesis	Jeffrey M. Woolridge Chapter 19, AP Chapter 6
	27 Mar	14	Difference-in-Differences	Joshua D. Angrist and Jörn-Steffen Pischke Chapter 5
	1 Apr	LAB4	Difference-in-Differences (Deadline for LAB4 (submission of R code & regression results write-up): Apr 8)	-
	3 Apr	LAB4	Difference-in-Differences	-
	22 Apr	15	Summary and Questions	-

Textbooks Used	Jeffrey M. Wooldridge (2019): Introductory Econometrics: A Modern Approach, 7th edition Joshua D. Angrist and Jörn-Steffen Pischke (2014): Mastering 'Metrics: The Path from Cause to Effect. Some additional material will be distributed on the learning platform (Leganto). e.g., case study: housing prices and causal inference; reading on ethics in econometrics	
Assessment methods (% provided)	**Exam**	75%
	Test	
	Assignment	25% (group)
	Class Participation	
	Others (please specify)	
Total number of contact hours	**Lecture**	4
	Tutorials	
	Others (e.g. Seminars)	
	Total Hours Per Week (T)	4

	Number of Weeks (N)	15
	Total Contact Hours (T * N)	60
PU Course Outline URL	https://www.nhh.no/en/courses/econometrics/	