

Syllabus

Syllabus

Titul dl curs	Econometria per l'Economia
Codesc dl curs	27347
Titul suplementar	
SSD	ECON-05/A
Lingaz	Inglese
Curs de laurea	Corso di laurea in Economia e Management
D'autri cursc de laurea (cursc deberieda)	
Dozenc	prof. Francesco Ravazzolo, Francesco.Ravazzolo@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/36066 dr. Gery Andres Diaz Rubio, GeryAndres.DiazRubio@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/51046
Assistent didatich	
Semester	Primo semestre
Ann/Agn de stude	3
Credic universitars	6
Ores de insegnament	36
Ores de laboratore	20
Ores de stude individual	-
Ores de riceviment prevedudes	18
Ressum� di contegnus	- Matrix Algebra, Stochastic Issues and Distribution Theory - Linear Regression with a Single Regressor and with Multiple Regressors - Hypothesis Tests and Confidence Intervals in Linear Regression

	Models - Special topics in linear regressions, such as heteroscedasticity and autocorrelation - Regression with Panel Data (Advantages and limitations of fixed and random effects regression) - Regression with a Binary Dependent Variable, Categorical data analysis
Argomenc dl curs	This introductory econometrics course provides a comprehensive overview of statistical methods for analyzing economic data. It starts with the foundational concepts of Matrix Algebra, Stochastic Issues, and Distribution Theory, which are essential for understanding the underlying principles. The core of the course focuses on Linear Regression, beginning with a single regressor and expanding to models with multiple regressors. The students will learn to perform Hypothesis Tests and construct Confidence Intervals to draw valid conclusions from your data. The curriculum also addresses common real-world challenges in regression, such as heteroscedasticity and autocorrelation. Finally, the course covers advanced topics in data analysis, including a detailed examination of Regression with Panel Data, exploring the differences between fixed and random effects, and methods for analyzing qualitative data through Regression with a Binary Dependent Variable and Categorical Data Analysis.
Paroles clef	Linear Regression, Hypothesis Testing, Panel and Binary Data, Econometric models
Prerequisic aconsiés	Basic knowledge of statistics and mathematics
Cursc propedeutics	A prerequisite for sitting the exam is the completion of the additional requirements (OFA) that may have been assigned
Modalité de enseignament	Lectures, practical labs, group project, face-to-face coaching and mentoring, guest lectures from external experts.
Oblianza de frecuencia	Attendance not compulsory but recommended
Obietifs formatifs y competenzes da arjonje	ILO (Intended Learning Outcomes) ILO 1 Conoscenza e comprensione

	ILO 1.1 conoscenza degli strumenti matematici di livello base ed intermedio per la comprensione e l'analisi dei meccanismi economici attraverso modelli teorici ed applicazioni empiriche ILO 1.2 conoscenza degli strumenti per l'analisi statica, dinamica, e quella comparativa per l'analisi dei dati su individui, imprese ed economie ILO 1.3 conoscenza e comprensione della statistica descrittiva, dei fondamenti della teoria della probabilità e dei metodi a campione, delle distribuzioni standard e della loro applicazione all'analisi economica nonché della regressione lineare e non lineare ILO 2 Capacità di applicare conoscenza e comprensione ILO 2.1 saper analizzare dati economici usando metodi della statica descrittiva, parametrica e non parametrica nonché regressione lineare e non lineare e interpretare i risultati ILO 2.2 saper stabilire l'impostazione e lo svolgimento di un progetto empirico con l'utilizzo di un software econometrico e di base dati finanziari o economici ILO 2.3 saper utilizzare gli strumenti informatici per le analisi delle economie ILO 3 Autonomia di giudizio ILO 3.1 scegliere i più appropriati metodi di analisi sia quantitativi che qualitativi ILO 3.2 trovare le informazioni necessarie in banche dati, fonti giuridiche e letteratura scientifica ILO 3.3 utilizzare il ragionamento logico per combinare informazione e metodi analitici, anche tramite moderni pacchetti software, per arrivare ad una soluzione ILO 4 Capacità di apprendimento ILO 4.1 reperire informazioni da banche dati, letteratura scientifica, leggi e normativa come richiesto nella vita professionale ILO 4.2 analizzare, elaborare criticamente ed integrare dati, informazioni ed esperienze future, anche tramite software avanzati
Obietifs formatifs y competenzes da arjonje	

(informazioni supplementari)	
Sort de exam	For attending students doing the mid-term assignment: written exam and a mid-term assignment. The written exam includes an essay and practical questions to test knowledge of theory, method and application skills. Oral group assignment carried in groups in the mid-term in a form of a presentation. For non-attending students or attending students without mid-term assignment: written exam. The written exam includes two essays and several practical questions to test knowledge of theory,
Criteri de valutazione	Final mark for students doing the mid-term assignment is a sum of marks from the group assignment and a written exam. Student will analyse econometric problems in both academic and practical contexts, displaying effective quantitative problem-solving skills. With a clarity of answers and mastery of research method, ability to collect and process the data, make critical comparisons and judgements, summarize, establish and measure the relationships within the project. An assignment also test student's ability to work in a team, creativity, IT and communication skills, critical thinking, cooperation and demonstrate individual's reflection and judgement. Final written exam. Final mark for students without the mid-term assignment is the result of the written exam. ILOs assessed 1 to 4
Bibliografia obbligatoria	Slides provided by professor.
Bibliografia consigliata	Christiaan Heij, Paul de Boer, Philip Hans Franses, Teun Kloek, and Herman K. van Dijk, Econometric Methods with Applications in Business and Economics, Oxford University Press. Marno Verbeek, A Guide to Modern Econometrics, Wiley 4th Edition. Jim H. Stock and Mark W. Watson, Introduction to Econometrics, Pearson International 3d Edition.
De più informazioni	

OSS	Istruzione di qualità, Parità di genere, Partnership per gli obiettivi, Innovazione e infrastrutture, Lotta contro il cambiamento climatico, Buona occupazione e crescita economica
-----	---