Syllabus

Course Description

Course Title	Impact Evaluation
Course Code	27507
Course Title Additional	
Scientific-Disciplinary Sector	ECON-03/A
Language	English
Degree Course	Master in Data Analytics for Economics and Management
Other Degree Courses (Loaned)	This course is offered within the Master's programme in Public Policy and Innovative Governance (LM-63) - course 27612
Lecturers	Prof. Dr. Alexander Moradi, Alexander.Moradi@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/39937
Teaching Assistant	
Semester	First semester
Course Year/s	1
CP	6
Teaching Hours	- 24 hours of in-person lectures - 12 hours of video lectures (counted as 24 hours to account for re-watching)
Lab Hours	6
Individual Study Hours	-
Planned Office Hours	18, including 6 hours offered as virtual classroom sessions
Contents Summary	The course: a) explores how impact evaluation answers the question "what works?" in public policy, introducing Randomized Controlled Trials (RCTs) as the gold standard approach; b) covers additional quantitative techniques for causal analysis, training students to design, implement and analyse evaluations with statistical software; c) develops skills for critically appraising evidence and translating empirical insights into clear, actionable recommendations for

	governments, public administrations, NGOs and international agencies.
Course Topics	1) The Experimental Ideal: Causal Effects and the Selection Problem 2) Randomized Control Trials, ethical and practical challenges, communication and policy consulting 3) Natural experiments (discovering, analyzing, evaluating) 4) Panel, Difference-in-Differences, Instrumental Variables 5) Regression Discontinuity Designs 6) Synthetic Control
Keywords	Policy Evaluation, Causal Inference, Data Analysis
Recommended Prerequisites	
Propaedeutic Courses	
Teaching Format	Lectures, pre-recorded videos, and laboratory sessions. The course adopts a blended, student-centred approach that emphasises problem-based learning and active engagement. A portion of the lecture content is made available online in advance, allowing students to explore key concepts independently and at their own pace before attending class. This preparatory work enables inperson sessions to focus on the application of knowledge through real-world problems, collaborative activities, and guided discussions - fostering critical thinking and deeper learning. The course is fully aligned with the principles of the Italian Universities Digital Hub (EDUNEXT) initiative (https://edunext.eu), which promotes the integration of digital resources and active learning strategies within university teaching.
Mandatory Attendance	Attendance is recommended, but not mandatory.
Specific Educational Objectives and Learning Outcomes	Intended Learning Outcomes (ILO) ILO 1 Knowledge and understanding: ILO 1.1 Students will develop specialised knowledge within the economic and business domains, tailored to their areas of interest and essential for addressing decision-making and managerial challenges in both public and private organisations. This learning outcome emphasises an interdisciplinary approach to problem-solving and organisational analysis. ILO 1.2

	Within the Data Analytics for Economics track, students will acquire advanced knowledge in economic theory, economic analysis, and econometrics through the study of microeconomics and macroeconomics, decision theory under uncertainty, time-series analysis and forecasting techniques, and methods for causal inference using both administrative and experimental data. Additionally, students will develop competencies in data analysis, applying quantitative and computational approaches to address complex economic problems. ILO 2 Applying knowledge and understanding: ILO 2.1 Students will demonstrate the ability to utilise and apply models designed for market analysis and for the formulation of economic policies. This outcome emphasises the integration of theoretical and empirical approaches to support evidence-based policy development and strategic decision-making. ILO 3 Making judgements: ILO 3.1 The student acquires the ability to apply acquired knowledge to interpret data in order to make directional and operational decisions in a business context. ILO 3.2 The student acquires the ability to apply acquired knowledge to support processes related to production, management and risk promotion activities and investment choices through the organisation, analysis and interpretation of complex databases. ILO4 Communication skills: ILO 4.1 The student acquires the ability to communicate effectively in oral and written form the specialised content of the individual disciplines, using different registers, depending on the recipients and the communicative and didactic purposes, and to evaluate the formative effects of his/her communication. ILO 5 Learning skills: ILO 5.1 The student acquires knowledge of scientific research tools. He/she will also be able to make autonomous use of information technology to carry out bibliographic research and investigations both for his/her own training and for further

	education. Furthermore, through the curricular teaching and the activities related to the preparation of the final thesis, she will be able to acquire the ability - to identify thematic connections and to establish relationships between methods of analysis and application contexts; - to frame a new problem in a systematic manner and to implement appropriate analysis solutions; - to formulate general statistical-econometric models from the phenomena studied.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	For Attending and Non-Attending Students 1. Impact Evaluation Design – 40% Students develop and present an evaluation design for a public policy or programme, defining the causal question, identification strategy, assumptions, threats to validity, data needs, and policy relevance. ILOs: ILO2.3, ILO2.4, ILO3.1, ILO3.2, ILO3.3, ILO4.1. 2. Applied R Exercise – 20% Students submit the R script developed during Exercise 6, implementing and interpreting the main OLS, first-stage, reduced-form, Wald, and 2SLS analyses. ILOs: ILO2.1, ILO3.3, ILO5.1. 3. Final Individual Test – 40% A 40-minute multiple-choice test assessing understanding and application of impact-evaluation methods, causal identification, interpretation of estimates, assumptions, and threats to validity. ILOs: ILO1.1, ILO1.2, ILO2.1, ILO2.2, ILO3.1, ILO3.3. Assessment components are valid for one academic year only.
Evaluation Criteria	1. Impact Evaluation Design - Clarity of the causal question - Appropriateness of the identification strategy - Understanding of assumptions and threats to validity - Feasibility of data and implementation

	- Policy relevance - Quality of oral presentation and discussion 2. Applied R Exercise - Correctness of the empirical analysis - Correct interpretation of results - Clarity and reproducibility of the R code 3. Final Individual Test - Accuracy of answers - Correct application of impact-evaluation concepts and methods - Correct interpretation of causal estimates, assumptions, and validity threats
Required Readings	Cunningham, S. (2025), Causal Inference. The Mixtape.
Supplementary Readings	Dunning, T. (2012). *Natural Experiments in Social Sciences*, Cambridge University Press. Gertler, Paul J.; Martinez, Sebastian; Premand, Patrick; Rawlings, Laura B.; Vermeersch, Christel M. J.. 2016. Impact Evaluation in Practice, Second Edition. Washington, DC: Inter-American Development Bank and World Bank. Further supplementary reading material will be published regularly on OLE.
Further Information	
Sustainable Development Goals (SDGs)	No poverty, Partnerships fot the goals, Good health and well-being, Quality education, Gender equality, Clean water and sanitation, Affordable and clean energy, Decent work and economic growth, Industry, innovation and infrastructure, Reduced inequalities, Sustainable cities and communities, Responsible consumption and production, Climate action, Life below water, Life on land, Peace, justice and strong institutions, Zero hunger