Fakultät für Informatik
Facoltà di Scienze e Tecnologie informatiche
Faculty of Computer Science

COURSE DESCRIPTION − ACADEMIC YEAR 2020/2021

Course title	**Advanced Economics for Digital Business** Specialization: Digital Marketing / Digital Finance
Course code	76422
Scientific sector	SECS-P/02
Degree	Bachelor in Informatics and Management of Digital Business (L-31)
Semester	1
Year	3
Credits	6
Modular	No

Total lecturing hours	30
Total lab hours	12
Attendance	Highly Recommended, but not required
Prerequisites	Economics of Digital Markets
Course page	https://ole.unibz.it/

Specific educational objectives	This course has two objective. The first is to give the students a broad background on how the macro-economy operates and the policies the government uses to encourage growth and manage business cycles. The second goal is to give the students practical skills in analyzing data to answer questions about the causal impact of different decisions or policies on outcomes for individuals and firms.

Lecturer	Steven Stillman
Contact	Office E3.03, steven.stillman@unibz.it, tel. 0471 013132
Scientific sector of lecturer	SECS-P/03
Teaching language	English
Office hours	See timetable
Lecturing assistant (if any)	Jan Ditzen
Contact LA	Piazza Università 1, jan.ditzen@unibz.it
Office hours LA	By appointment (arrange beforehand via e-mail).
List of topics	• Productivity, Technology, Institutions, and Economic Growth We will discuss how differences in technology and institutions are related to differences in productivity and economic growth • Employment/Unemployment/Business Cycles We will discuss what causes employment and unemployment to fluctuate over time and how the government can manage this • Trade/Exchange Rate/Open Economy We will discuss how countries trade with each other and the role of the exchange rate in directing resources between countries • Introduction to Applied Research We will discuss what is meant by applied research and how one goes about analyzing data to answer research questions • Identifying Causal Effects We will discuss what is meant by identifying causal effects and give a brief introduction to different econometric tools used here • In-depth Discuss of Empirical Methods for Causal Analysis

	We will have an in-depth discussion of using various empirical methods including panel data, difference-in-differences, instrumental variables and regression discontinuity design
Teaching format	Lectures, discussions, and small group projects

Learning outcomes	Knowledge and understanding: • D1.17 - Know further methods of Digital Finance and Digital Advertising and their application. • D1.18 - Understand the interdisciplinary approach to IT projects that takes into account technical foundations, business needs, social and dynamic aspects and the regulatory framework. Applying knowledge and understanding: • D2.3 - Ability to analyse business problems and to develop proposals for solutions with the help of IT tools. • D2.4 - Ability to formalise and to analyse procedures and operational processes, to recognise and use optimisation potentials. • D2.6 - Ability to design, describe and present IT solutions to policy makers. • D2.9 - Ability to support the management of IT departments and software companies by providing information as needed. • D2.11 - Ability to analyse large amounts of data on economic facts and processes. • D2.13 - Ability to apply additional knowledge in the subjects of Digital Finance and Digital Marketing. • D2.18 - Know how to communicate with the client in written and oral form on a professional level in English, Italian or German. Making judgments • D3.1 - Ability to collect and interpret data useful for forming independent judgments on IT and economic aspects of information systems. • D3.3 - Ability to compare and evaluate different IT solutions based on their technical characteristics and key business figures. • D3.4 - Ability to assess fundamental economic and business facts on the basis of numerical data. Communication skills • D4.1 - Be able to use the three languages English, Italian and German and, in particular in English, be able to use appropriate technical terminology and communication style. • D4.2 - Ability to use modern means of communication also for remote interactions. • D4.3 - Ability to negotiate with people with different professional experiences the definition and requirements of corporate information systems. Learning skills • D5.2 - Learning ability to carry out strategic and IT project activities in corporate communities, also distributed. • D5.3 - Ability to follow rapid technological developments and to learn about innovative aspects of the latest generation of information technology and systems.

Assessment	An obligatory final exam. For the final exam neither textbooks, nor other teaching materials, nor any electronic devices are allowed in the examination room. Dictionaries without notes and simple calculators are permitted..
Assessment language	English
Assessment Typology	Monocratic
Evaluation criteria and criteria for awarding marks	The grade on the final exam will determine the grade in the course. The textbooks, "Macroeconomics" by Daron Acemoglu, David Laibson, and John List and, "Mastering 'Metrics: The Path from Cause to Effect Paperback by Joshua Angrist and Jörn-Steffen Pischke and the in-class slides of the instructor will form the basis for the material covered in the exam and will be made available to the students online. Criteria are standard: correct procedure and solution counts. In addition, solutions to problems require the ability to summarize, evaluate, and establish relationships between topics, and skills in critical thinking..

Required readings	• Macroeconomics, 2nd Edition
	  Daron Acemoglu, David Laibson, John List, University of Chicago
	  Pearson 2018
	• Mastering 'Metrics: The Path from Cause to Effect
	  Joshua Angrist and Jörn-Steffen
	  Princeton University Press 2014
	
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Supplementary readings	• Introduction to Econometrics, 4th Edition
	  James H. Stock, Mark W. Watson
	  Pearson 2019

Software used	None