Syllabus
Course description

Course title	Regional Development and Digitalization
Course code	31033
Scientific sector	ECON-01/A and ECON-04/A
Degree	Master in Tourism Management
Semester and academic year	1st and 2nd Semester 2025/2026
Year	1st study year
Credits	12
Modular	YES

Total lecturing hours	72 Module 1: 36 Lecturing hours dr. Nicola Campigotto Module 2: 36 Lecturing hours Prof. Dr. Federico Boffa 12h To be defined: 24h Course responsible: Prof. Dr. Federico Boffa
Total lab hours	12 Lab Hours
Total exercise hours	-
Attendance	suggested, but not required
Prerequisites	not foreseen
Course page	Course Offering - Enrolled from 2025 / Free University of Bozen-Bolzano

Specific educational objectives	The course refers to the typical educational activities and belongs to the scientific area of Economics. **Module 1:** This course provides an applied introduction to modern regional economics. It focuses on the determinants of the attractiveness of a territory and will be divided into two parts. An initial part will deal with classical regional economics, while a second part will deal with environmental economics. The first part will introduce students to the determinants of firms' and people's location decisions as well as on the principles of urban economics. It will look at the role of infrastructures and at place-based policies. The second part will provide for core concepts of environmental economics with special emphasis on policy. To this purpose, it will start with the economic theory of environmental policy. Based on the theory of externalities, it will analyze instruments for environmental policy from an economic point-of-view. It will then introduce topics of behavioral environmental economics.

The course is aimed at understanding how formal models can be used to analyze real-world situations. Theoretical analyses are complemented with empirical evidence, case studies, and discussions of implications for environmental policies.

Students acquire a broad knowledge in the field of regional and environmental economics and develop an economic intuition by means of examples and applications. More precisely, they will be provided with:

- the toolkit to independently deepen their knowledge in regional and environmental economics and understand advanced research;
- the ability to apply regional and environmental economic theory in research and practice.

Students will understand, among others, how to formulate and solve problems in regional and environmental economics using advanced economic theory. To address these questions adequately, students learn to apply mathematical tools and game theory, such as optimization methods. Most importantly, students will not only be able to solve these models analytically, but also understand the intuition at work.

Module 2:
The course will look at the microeconomics of digital markets. It will analyze the impact of ICT and on the internet on pricing, advertising and the emergence of platforms. It will be discussed how the emergence, stability and co-existence of platforms depends on the heterogeneity of products, the degree of competition, and the network effects within and between groups. It will look, in particular, at the effects of the sharing economy on tourism, and, in general, local development. A particular emphasis will be placed on the analysis of the behavior of platforms, including AirBnB, online travel agencies (e.g., Booking.com), and the rating systems (e.g., Tripadvisor).

Module 1	Regional Economics and Development (Loaned from M1 of 31003 Regional Development and Sustainability)
Lecturer 36h **Exe 18h**	dr. Nicola Campigotto Mail: nicola.campigotto@unibz.it Campus Bruneck- Brunico, 1st Floor, 1.09, Faculty of Economics and Management Nicola Campigotto / Free University of Bozen-Bolzano
Scientific sector of the lecturer	SECS-P/02

Teaching language	English
Office hours	Timetables / Free University of Bozen-Bolzano
List of topics covered	We will cover these topics: - Economics and the environment - Theory of externalities - Environmental policy - Behavioral insights in climate protection, resource management, and ecosystem services - Introduction to regional economics: basic concepts - Location decisions and market imperfections: determinants of consumers' and firms' and location decisions, spatial competition - Infrastructure as regional competitive advantage and regional disparities: toward policy aspects - Place-based policies and spatial disparities
Teaching format	Lectures and exercises

Module 2	Digital Economics
Lecturer 12h	Prof. Federico Boffa, Federico.Boffa@unibz.it, Campus Bruneck- Brunico, NOI Techpark 3rd Floor, Office 3.12, Faculty of Economics and Management Federico Boffa / Free University of Bozen-Bolzano
Lecturer 24h	to be defined
Scientific sector of the lecturer	SECS-P/06
Teaching language	English
Office hours	Timetables / Free University of Bozen-Bolzano
List of topics covered	- Economics of complement goods; - Network Externalities; - Two sided markets; - Platforms; - Sharing economy; - Focus on Airbnb; - Focus on online travel agencies; - Feedback systems - Real-time pricing and yield management
Teaching format	Lectures, cases, and in-class presentations
Scientific sector of the lecturer	To be defined
Teaching language	English
Office hours	Timetables / Free University of Bozen-Bolzano
List of topics covered	- Network Externalities; - Two sided markets; - Platforms; - How to finance platforms (e.g. fixed or variable fees, advertisment, sale of data) - Pricing mechanisms (auctions vs. fixed prices)

	- Regional possibilities for challenging monopolistic platforms - Applications to the tourism sector (e.g. Booking.com, Airbnb)
Teaching format	Lectures, discussions and presentations by students

Learning outcomes	**Knowledge and understanding** M1: Regional Economics and Development: Students study analytical and quantitative tools to acquire a broad knowledge in regional and environmental economics. They will not only be able to solve the presented models mathematically, but also to understand the intuition at work by means of examples and applications. M2: Digital Economics: Students will be required to master the basic economic concepts involved in the digital markets, and in particular complement goods, network externalities and platforms. **Applying knowledge and understanding** M1: Regional Economics and Development: Students acquire the toolkit to independently deepen their knowledge in the field of regional and environmental economics. They will develop the ability to understand more advanced research and apply the acquired knowledge to real-word situations. M2: Digital Economics: Students will apply the intuitions from the notions and from the formal model to analyze how platforms, the sharing economy and the feedback systems are changing the tourism industry and how artificial intelligence algorithms are changing the hotels pricing models. **Making judgments** M1: Regional Economics and Development: The field of regional and environmental economics has many real-world applications. This course promotes strategic, analytic and, critical thinking to understand concrete situations and develop policy recommendations. M2: Digital Economics: Students will use the economic categories to critically look at the impact of digitalization and of the development of artificial intelligence on the tourism industry **Communication skills** M1: Regional Economics and Development: Regional and environmental theories are formulated using formal models. However, students should not only be able to solve these models mathematically, but also state the intuition in words. Graduates will be able to exchange information, ideas, and solutions in both models and words.

	M2: Digital Economics:
	Students will learn to communicate complex economic notions and models in a clear way also to non experts in the fields – something that might prove very useful in particular to those pursuing a managerial career.
	Learning skills
	M1: Regional Economics and Development:
	The focus on model-building enables students to independently deepen their knowledge in the field of regional and environmental economics. Graduates will be able to understand more advanced research and teach themselves concepts which are not dealt with in this course. Furthermore, they will be able to apply theory and the underlying intuition at work to many real-word applications.
	M2: Digital Economics:
	Students will deepen their knowledge in the field of microeconomics, in particular those related to the recent advances in digitalization and artificial intelligence. Graduates will be able to understand more advanced research and teach themselves concepts which are not dealt with in this course. Furthermore, they will be able to apply theory and the underlying intuition at work to many real-word applications.

Assessment	M1: Regional Economics and Development: Grading is 100% based on a final written exam. Students are required to answer open questions. Assessment is the same for both attending and non-attending students. M2: Digital Economics: Attending students: in-class presentation (up to 30%), class participation (up to 20%), final exam (at least 50%) Non attending students: final exam (100%)
Assessment language	English
Evaluation criteria and criteria for awarding marks	M1: Regional Economics and Development: Clarity of answers and ability to address case studies and policy problems. M2: Digital Economics: Relevant for final exam: clarity of answers, ability to understand both the formal models and the intuitions behind them; ability to apply knowledge to real-life situations.

Required readings	M1: Regional Economics and Development: - Capello, R: Regional Economics, Routledge, 2015 - Sterner, T., & Coria, J. (2013). Policy instruments for environmental and natural resource management. Routledge.

	- Perman, R. (2003). Natural resource and environmental economics. Pearson Education. M2: "Digital Economics", by A. Goldfarb and C. Tucker, Journal of Economic Literature, vol. 57, n.1, 2019 Relevant material will be made available at the beginning of the class.
Supplementary readings	M1: Regional Economics and Development: Mathematics - Simon, C. & L. Blume. Mathematics for Economists. WW Norton & Co., 2014. Microeconomic theory - Varian, H. Intermediate Microeconomics. A Modern Approach. Ninth edition, WW Norton & Co., 2014. M2: Digital Economics - "Digital Economics", by A. Goldfarb and C. Tucker, Journal of Economic Literature, vol. 57, n.1, 2019 - Comino, S e Manenti F., "Industrial Organization of High-Technology Markets", E-Elgar, 2014