

# Syllabus Course description

Course title	Regional Development and Digitalization
Course code	31004
Scientific sector	SECS-P/02 and SECS-P/06
Degree	Master in Tourism Management
Semester and academic year	1st and 2nd Semester 2024/2025
Year	1st study year
Credits	12
Modular	YES

Total lecturing hours	72 Module 1: 36 Lecturing hours Prof. Dr. Elisabeth Gsottbauer 18h dr. Nicola Campigotto: 18h  Module 2: 36 Lecturing hours Prof. Dr. Federico Boffa 12h Prof. Eberhard Feess: 24h  Course responsible: Prof. Dr. Elisabeth Gsottbauer
Total lab hours	12 Lab Hours
Total exercise hours	-
Attendance	suggested, but not required
Prerequisites	not foreseen
Course page	https://www.unibz.it/en/faculties/economics- management/master-tourism-management/course- offering

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 18h	Prof. Dr. Elisabeth Gsottbauer, <u>Elisabeth.Gsottbauer@unibz.it</u> , Campus Bruneck/Brunico,  NOI Techpark 3 <sup>rd</sup> Floor, Office 3.22, Faculty of Economics and Management



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Scientific sector of the	sustainability/team/person/36371-elisabeth-gsottbauer  SECS-P/02 / SECS-P/06
lecturer Teaching language	English
Office hours	https://www.unibz.it/en/timetable/?department=26&degr
Office flours	ee=13009%2C13134
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
Teaching format	Lectures and case studies.
Lecturer 18h	
Scientific sector of the lecturer	SECS-P/02
Teaching language	English
Office hours	https://www.unibz.it/en/timetable/?department=26&degr
	ee=13009%2C13134
Lecturing assistant	dr. Nicola Campigotto
	Mail: nicola.campigotto@unibz.it
	Campus Bruneck- Brunico, 1 <sup>st</sup> Floor, 1.09, Faculty of Economics and Management
	https://www.unibz.it/en/home/research/competence-
	centre-economic-ecological-social-
	sustainability/team/person/50457-nicola-campigotto
List of topics covered	- Introduction to regional economics: basic concepts
	<ul> <li>Location decisions and market imperfections:</li> </ul>
	determinants of consumers' and firms' and
	location decisions, spatial competition
	<ul> <li>Infrastructure as regional competitive advantage</li> </ul>
	and regional disparities: toward policy aspects
	<ul> <li>Place-based policies and spatial disparities</li> </ul>
Teaching format	Lectures and exercises
- Cading Torritor	

Module 2	Digital Economics
Lecturer 12h	Prof. Federico Boffa, <u>Federico.Boffa@unibz.it</u> , Campus Bruneck- Brunico, NOI Techpark 3 <sup>rd</sup> Floor, Office 3.12, Faculty of Economics and Management <a href="https://www.unibz.it/en/faculties/economics-management/academic-staff/person/5799-federico-boffa">https://www.unibz.it/en/faculties/economics-management/academic-staff/person/5799-federico-boffa</a>
Lecturer 24h	Prof. Eberhard Feess Mail: eberhard.feess@unibz.it Campus Bruneck- Brunico, 1st Floor, 1.09, Faculty of Economics and Management



	https://www.unibz.it/en/faculties/economics- management/academic-staff/person/27470-eberhard-
	feess
Scientific sector of the lecturer	SECS-P/06
Teaching language	English
Office hours	https://www.unibz.it/en/timetable/?department=26&degr ee=13009%2C13134
List of topics covered	<ul> <li>Economics of complement goods;</li> <li>Network Externalities;</li> <li>Two sided markets;</li> <li>Platforms;</li> <li>Sharing economy;</li> <li>Focus on Airbnb;</li> <li>Focus on online travel agencies;</li> <li>Feedback systems</li> <li>Real-time pricing and yield management</li> </ul>
Teaching format	Lectures, cases, and in-class presentations
Scientific sector of the lecturer	SECS-P/06
Teaching language	English
Office hours	https://www.unibz.it/en/timetable/?department=26&degr ee=13009%2C13134
List of topics covered	<ul> <li>Network Externalities;</li> <li>Two sided markets;</li> <li>Platforms;</li> </ul>
	<ul> <li>How to finance platforms (e.g. fixed or variable fees, advertisment, sale of data)</li> <li>Pricing mechanisms (auctions vs. fixed prices)</li> <li>Regional possibilities for challenging monopolistic platforms</li> <li>Applications to the tourism sector (e.g. Booking.com, Airbnb)</li> </ul>

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.
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# 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  Assessment language	M1: Regional Economics and Development: Grading is based on a final exam. Students are required to solve 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%) 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.
Postuined readings	M1. Degional Economics and Development
Required readings	<ul> <li>M1: Regional Economics and Development: <ul> <li>Capello, R: Regional Economics, Routledge, 2015</li> <li>Sterner, T., &amp; Coria, J. (2013). Policy instruments for environmental and natural resource management. Routledge.</li> <li>Perman, R. (2003). Natural resource and environmental economics. Pearson Education.</li> </ul> </li> <li>M2: "Digital Economics", by A. Goldfarb and C. Tucker, Journal of Economic Literature, vol. 57, n.1, 2019</li> <li>Relevant material will be made available at the beginning of the class.</li> </ul>
Supplementary readings	<ul> <li>M1: Regional Economics and Development: Mathematics <ul> <li>Simon, C. &amp; L. Blume. Mathematics for Economists. WW Norton &amp; Co., 2014.</li> </ul> </li> <li>Microeconomic theory <ul> <li>Varian, H. Intermediate Microeconomics. A Modern Approach. Ninth edition, WW Norton &amp; Co., 2014.</li> </ul> </li> <li>M2: Digital Economics</li> </ul>



	<ul> <li>"The economics of platforms: concepts and strategy"         Paul Belleflamme and Martin Peitz, 2021.     </li> <li>Comino, S e Manenti F., "Industrial Organization of High-Technology Markets", E-Elgar, 2014</li> </ul>
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