

Syllabus

Course Description

Course Title	Energy and Resource Economics
Course Code	27613
Course Title Additional	
Scientific-Disciplinary Sector	ECON-03/A
Language	English
Degree Course	Master in Public Policy and Innovative Governance
Other Degree Courses (Loaned)	
Lecturers	dr. Nicola Campigotto, Nicola.Campigotto@unibz.it https://www.unibz.it/en/home/research/competence-centre-economic-ecological-social-sustainability/team/person/50457
Teaching Assistant	
Semester	Second semester
Course Year/s	2
CP	6
Teaching Hours	36 ONLINE
Lab Hours	-
Individual Study Hours	-
Planned Office Hours	18
Contents Summary	Economic principles related to energy production, distribution, and consumption, and their relationship with climate change. Policy and regulation for sustainable energy and resource management, including externalities, international agreements, and renewable energy economics. Quantitative analysis using econometric models to measure policy effectiveness and market dynamics in energy and resource markets.
Course Topics	Climate change and environmental externalities, Common good and natural resource dilemmas, Carbon taxation, Regulation for resource management and energy conservation.

Keywords	Natural resources, Energy, Climate Change, Externalities, Regulation
Recommended Prerequisites	Basic microeconomics and statistics (recommended but not essential)
Propaedeutic Courses	
Teaching Format	Lectures and in-class presentations
Mandatory Attendance	Attendance is recommended, but not mandatory.
Specific Educational Objectives and Learning Outcomes	<p>ILO (Intended Learning Outcomes)</p> <p>ILO1 Knowledge and understanding ILO1.1 The student acquires the knowledge of economic theory necessary to understand and analyse economic and business phenomena in the public sector in order to support decision-making processes. Knowledge of public policy and the tools necessary for the design of sustainable policies will be consolidated. Knowledge related to the labour market, education and health will also be deepened, functional to the development of public policy analysis and evaluation skills.</p> <p>ILO2 Ability to apply knowledge and understanding ILO2.1 ability to interpret market trends through the application of appropriate economic models and implement economic analysis tools, also using data ILO2.2 ability to apply economic models to describe the behaviour of economic agents and develop sustainable economic policies in various application domains of interest to companies and public bodies</p> <p>ILO3 Making judgements ILO3.1 ability to apply acquired knowledge to interpret economic and business phenomena in order to make managerial and operational decisions in the context of public administration ILO3.2 ability to select data and use appropriate information to describe a problem concerning the design, implementation and evaluation of public sector projects and policies, aiming at innovation and improvement of processes, products and results ILO3.3 ability to relate models and empirical evidence in the study of public policy phenomena ILO3.4 ability to reflect, also in a perspective of public ethics and</p>

	<p>sustainability with regard to future generations, on the responsibilities connected to the use of public resources</p> <p>ILO4 Communication skills ILO4.1 ability to communicate effectively in oral and written form the specialised content of individual disciplines, using different registers according to recipients and communicative and didactic purposes, and to evaluate the formative effects of his/her communication</p> <p>ILO5 Learning ability ILO5.1 ability to use information technology autonomously to carry out bibliographical research and investigations and for one's own training and further education.</p>
<p>Specific Educational Objectives and Learning Outcomes (additional info.)</p>	<p>The course is part of the complementary educational activities chosen by students and falls within the scientific area of Economics (SECS-P/03).</p> <p>The course aims to strengthen students' ability to design and critically assess regulatory strategies for environmental sustainability. It examines the economics of energy and natural resources, with particular emphasis on climate change and the role of effective public policy and regulation. By combining theoretical perspectives with applied data analysis, the course prepares students to address key challenges and opportunities in the development of sustainable environmental policies.</p> <p>Students will acquire a solid understanding of the main economic issues related to energy production and consumption, as well as the economic and policy implications of climate change. They will also learn how to apply econometric modelling techniques to assess policy effectiveness and market dynamics.</p>
<p>Assessment</p>	<p>Assessment for attending students</p> <p>Class participation: 10% (ILO1, ILO3, ILO4)</p> <p>In-class presentation of a paper chosen by the student: 30% (ILO2, ILO4, ILO5)</p> <p>Written final exam: 60% (ILO1 to ILO4)</p> <p>Assessment for non-attending students</p>

	<p>Short literature-review essay of 5-10 pages on a topic chosen by the student: 40% (ILO1 to ILO5) Written final exam: 60% (ILO1 to ILO4)</p> <p>The final exam will be closed-book and will consist of open-ended questions.</p>
Evaluation Criteria	<p>Class participation: evaluation criteria Regular attendance; active contributions to class discussions; engagement with peers' comments and presentations.</p> <p>In-class presentation of a paper: evaluation criteria Understanding of the paper's research question, theoretical framework, methodology, and findings; ability to critically assess the paper's strengths and limitations; clarity and structure of the presentation</p> <p>Literature-review essay: evaluation criteria Quality and appropriateness of the selected literature; ability to synthesize rather than merely summarize existing studies; critical assessment of the literature; coherence and structure of the argument; clarity of writing and use of academic language; correct citation and referencing.</p> <p>Final exam: evaluation criteria Understanding of key concepts; Accuracy, completeness, and clarity of answers.</p>
Required Readings	<p>Main textbook: Jonathan Harris and Brian Roach (2022), <i>Environmental and Natural Resource Economics A Contemporary Approach</i>, 5th edition, Routledge.</p> <p>Additional readings will be provided during the course.</p>
Supplementary Readings	
Further Information	The course is offered online.
Sustainable Development Goals (SDGs)	Sustainable cities and communities, Life below water, Climate action, Responsible consumption and production