

Syllabus

Course Description

| | |
|---------------------------------------|--|
| Course Title | Environmental and Resource Economics |
| Course Code | 27200 |
| Course Title Additional | |
| Scientific-Disciplinary Sector | ECON-03/A |
| Language | German |
| Degree Course | Bachelor in Economics, Politics and Ethics |
| Other Degree Courses (Loaned) | |
| Lecturers | Prof. Günter Schamel, Guenter.Schamel@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/12015 Dr. Stefan Gruber, Stefan.Gruber@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/1073 Dr. Wolfgang Gick, wolfgang.gick@unibz.it https://www.unibz.it/en/faculties/economics-management/academic-staff/person/33840 |
| Teaching Assistant | |
| Semester | First semester |
| Course Year/s | 3 |
| CP | 7 |
| Teaching Hours | 42 (18 Prof. Schamel + 24 dr. Gick) |
| Lab Hours | 21 |
| Individual Study Hours | - |
| Planned Office Hours | 21 (9 Prof. Schamel + 12 dr. Gick) |
| Contents Summary | The course introduces students to core economic principles of environmental and resource economics. Environmental economics covers market failures and externalities with environmental policy |

| | |
|----------------------------------|--|
| | <p>options such as Coasian payments, corrective taxation and regulations, including the relative advantage of environmental taxes over tradeable permits when policymakers face imperfect information. Additional topics include public goods; game theory and experimental economics related to climate politics and international agreements. Resource economics cover the allocation of natural resources over time, considering both renewable and non-renewables. It blends theory with practical examples in energy, land use, fisheries, and recycling and related policy interventions. Emphasis is placed on economic efficiency and intertemporal trade-offs and sustainability. Special topics will be treated in class projects.</p> |
| Course Topics | <p>Environmental Economics Micro- and game-theoretical foundations, economics and the environment, the theory of externalities and public goods, Coase's theorem and negotiated solutions, overview of environmental policy instruments and criteria for their evaluation, regulatory policy, taxes and tradable certificates, international aspects of environmental economics, behavioral aspects of environmental economics</p> <p>Resource Economics Dynamic efficiency; non-renewable resources; transition to renewable resources; recyclable resources; water, land, and forest resources; collectively usable resources; sustainable economic development.</p> |
| Keywords | <p>Environmental economics, Externalities, Public goods, Coase theorem, Policy evaluation, Regulatory policy, Environmental taxes, Tradable certificates, Behavioral economics, Resource economics, Dynamic efficiency, Non-renewable resources, Renewable resources transition, Recyclable resources, Water, Land and Forestry resources, Common-pool resources, Sustainable economic development</p> |
| Recommended Prerequisites | |
| Propaedeutic Courses | Previous attendance of an introductory course in microeconomics is strongly suggested, in order to properly follow the lectures. |
| Teaching Format | Lectures, exercises, student presentations |
| Mandatory Attendance | Attendance Highly recommended but not mandatory |

| | |
|--|---|
| Specific Educational Objectives and Learning Outcomes | <p>ILO (Intended Learning Outcomes)</p> <p>ILO 1 Knowledge and understanding</p> <p>ILO 1.1 the ability to apply the concepts of game theory to the economic behaviour of public and private actors;</p> <p>ILO 1.2 the ability to understand the role of governments in market economies;</p> <p>ILO 1.3 the ability to understand complex economics texts in the three languages of instruction;</p> <p>ILO 1.4 Recognise and understand the conditions necessary for sustainable economic development, taking into account the environment and natural resources;</p> <p>ILO 2 Ability to apply knowledge and understanding</p> <p>ILO 2.1 the ability to communicate fluently and spontaneously with native speakers on economic topics;</p> <p>ILO 2.2 the ability to understand the role of the state in relation to various economic policy issues and to consider possible economic policy solutions;</p> <p>ILO 2.3 the ability to understand the impact of the economy on the environment and resources and to develop strategic alternatives;</p> <p>ILO 3 Making judgements</p> <p>ILO 3.1 Acquire the necessary judgement and methodological tools to critically analyse data, sources, assumptions and implications of scientific practice and the political, ethical and legal contexts in which economic phenomena are situated and with which they interact.</p> <p>ILO 4 Communication skills</p> <p>ILO 4.1 Proficiency in written and spoken Italian, German and English, including the translation of these languages. Intercultural competence. Conceptual conciseness, ability to capture facts in writing, especially for scientific and science-based texts</p> <p>ILO 5 Learning skills</p> |
|--|---|

| | |
|---|--|
| | ILO 5.1 Fostering critical thinking and analytical skills to recognise complex problems in their long-term dynamics and in the diversity of their - also ethical - implications |
| Specific Educational Objectives and Learning Outcomes (additional info.) | |
| Assessment | <p>Both the written exam and the course project are mandatory. The exam addresses topics covered in the lecture. For attending students, the project may be done in groups of two and consists of two parts: a seminar paper (about 10-15 pages) to be submitted 7 days before the exam and a presentation of the main ideas (approx. 10-15 minutes) during the semester. Attending students must define their paper topic by November 30th.</p> <p>Non-attending students write their seminar paper independently and submit it 7 days prior to the exam date. Instructors must approve the paper topic at least 30 days before the exam date, otherwise any paper submitted is not valid. In addition, non-attending students may have to answer additional exam questions for not having to present their paper.</p> <p>The written exam counts for 60% and the course project for 40% towards the final grade.</p> <p>ILO 1-2 are assessed with the written exam. ILO 3-5 are assessed through the course project.</p> |
| Evaluation Criteria | The written exam assesses the quality and clarity of answers, language skills, and ability to accurately relate to the topics covered. The course project assesses creativity, critical thinking, synthesis skills, judgment. |
| Required Readings | <p>Phaneuf, D. & T. Requate. "A course in environmental economics". Cambridge University Press, 2017.</p> <p>Tietenberg, T. und Lewis, L. 2015. "Environmental and Natural Resource Economics". 10th Edition.</p> |
| Supplementary Readings | |
| Further Information | For the written exam, textbooks or other teaching materials or electronic devices are not allowed. Dictionaries without notes and simple calculators are permitted. |
| Sustainable Development Goals (SDGs) | Clean water and sanitation, Affordable and clean energy, Decent work and economic growth, Life on land, Sustainable cities and |

| | |
|--|--|
| | communities, Responsible consumption and production, Climate action, Industry, innovation and infrastructure |
|--|--|