

# Syllabus

## *Course Description*

<b>Course Title</b>	Sustainability Economics
<b>Course Code</b>	27611
<b>Course Title Additional</b>	
<b>Scientific-Disciplinary Sector</b>	ECON-02/A
<b>Language</b>	English
<b>Degree Course</b>	Master in Public Policy and Innovative Governance
<b>Other Degree Courses (Loaned)</b>	
<b>Lecturers</b>	Dr. PhD. Alberto Maria Zanni, AlbertoMaria.Zanni@unibz.it <a href="https://www.unibz.it/en/faculties/economics-management/academic-staff/person/52541">https://www.unibz.it/en/faculties/economics-management/academic-staff/person/52541</a>
<b>Teaching Assistant</b>	
<b>Semester</b>	First semester
<b>Course Year/s</b>	2
<b>CP</b>	6
<b>Teaching Hours</b>	36 ONLINE
<b>Lab Hours</b>	-
<b>Individual Study Hours</b>	-
<b>Planned Office Hours</b>	18
<b>Contents Summary</b>	The course covers the applied economics aspects of sustainability: a) the concept of sustainability and its implications in economic policy; b) environmental policy instruments: how to design policies towards sustainability; c) environmental valuation: eliciting values for non-market environmental goods and services; d) the economics of sustainable transport, cities, energy, tourism.
<b>Course Topics</b>	<ol style="list-style-type: none"> <li>1. The concept of sustainability and its economic implications</li> <li>2. Economic theory and practice of environmental policy (externalities, optimal pollution, abatement costs)</li> <li>3. Command and control instruments; subsidies, environmental</li> </ol>

	<p>taxation and trading systems</p> <p>4. Evaluation of environmental policy instruments</p> <p>5. Valuation of environmental assets (economic values, WTA and WTP, revealed preference methods, stated preference methods, alternatives to the more traditional methods)</p> <p>6. The economics of sustainable transport and cities (includes some elements of urban planning)</p> <p>7. Sustainability in other sectors (includes some elements of energy technology)</p>
<b>Keywords</b>	sustainability, externalities, equity, valuation, policy
<b>Recommended Prerequisites</b>	B1 level in English is required to sit the exam
<b>Propaedeutic Courses</b>	
<b>Teaching Format</b>	Frontal online lectures, mainly synchronous, discussion of reading material, presentations
<b>Mandatory Attendance</b>	Attendance is recommended, but not mandatory.
<b>Specific Educational Objectives and Learning Outcomes</b>	<p>ILO (Intended Learning Outcomes)</p> <p>ILO1 Knowledge and understanding</p> <p>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</p> <p>ILO2.1 ability to interpret market trends through the application of appropriate economic models and implement economic analysis tools, also using data</p> <p>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</p> <p>ILO3.1 ability to apply acquired knowledge to interpret economic</p>

	<p>and business phenomena in order to make managerial and operational decisions in the context of public administration</p> <p>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</p> <p>ILO3.3 ability to relate models and empirical evidence in the study of public policy phenomena</p> <p>ILO3.4 ability to reflect, also in a perspective of public ethics and sustainability with regard to future generations, on the responsibilities connected to the use of public resources</p> <p>ILO4 Communication skills</p> <p>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</p> <p>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><b>Specific Educational Objectives and Learning Outcomes (additional info.)</b></p>	<p>Knowledge and understanding</p> <p>Students will know and understand analytical tools used in environmental and sustainability economics and acquire knowledge on the theory of externalities with empirical applications in various sectors</p> <p>Applying knowledge and understanding</p> <p>Students will be able to comprehend and apply research contributions. They will learn how to compare the effectiveness of different environmental policy instruments and learn how to design environmental valuation studies, interpret theoretical ideas and applied research results.</p> <p>Making judgments</p> <p>Student will be able to reflect on specific problems and formulate judgments that include the valuation of environmental commodities and evaluation of environmental policies.</p>

	<p>Communication skills Students will be able to communicate content, key concepts, research ideas, problems and solutions as well as empirical research results to both a specialist and non-specialist audience.</p> <p>Learning skills Students will develop the ability to connect economic theory with real-world sustainability challenges. This entails independently expanding their understanding through in-depth engagement with scientific research and empirical analyses. They will cultivate skills essential for conducting thorough literature reviews and formulating precise research questions.</p>
<b>Assessment</b>	<p>For Attending students:</p> <p>I) Presentation (40% of the final grade). The presentation requires critical discussion of a case study in sustainability economics (ILO 01.1, 02.1-2, 03.1-4, 04.1, 05.1)</p> <p>II) Final exam (60% of the final grade). The final exam consists of analytical problems in multiple choice questions and short essay question form. (ILO 01.1, 02.1-2, 03.1-4, 04.1, 05.1)</p> <p>The final exam tests Skill 1 (Knowledge and understanding). The presentation allows to verify Skills 2, 3 and 4 (Applying knowledge and understanding, Making judgements, Communication skills). The skill concerned with autonomous study (Skill 5, Learning skills) is indirectly verified, because passing the final exam requires autonomous execution of exercises suggested by the lecturer and face-to-face discussions. (ILO 01.1, 02.1-2, 03.1-4, 04.1, 05.1)</p> <p>For non-attending students or students who do not take the presentation, the final exam is 100% of the final grade. (ILO 01.1, 02.1-2, 03.1-4, 04.1, 05.1)</p>
<b>Evaluation Criteria</b>	<p>Overall, students will be assessed against the learning outcomes.</p> <p>Presentations will be evaluated in terms of structure, content and communication techniques. Reaction to questions from the audience will also be part of the assessment, as well as questions</p>

	<p>addressed to other students during their presentations.</p> <p>Exam will be a mixture of multiple choice questions and essay type, valued against the criteria, in particular knowledge and understanding of the main concepts and their implications in real world policy settings.</p>
<b>Required Readings</b>	<p>The course material is mainly composed of the slides presented and discussed during the lectures (and the recordings of the lectures) plus some additional readings given at the end of the lectures. In addition:</p> <ul style="list-style-type: none"> <li>• Baumgärtner, S., Quaas, M., 2010. What is sustainability economics? <i>Ecological Economics</i> 69, 445–450. <a href="https://doi.org/10.1016/j.ecolecon.2009.11.019">https://doi.org/10.1016/j.ecolecon.2009.11.019</a></li> </ul>
<b>Supplementary Readings</b>	<p>The lectures will mainly be drawn from journal articles and books. The reference list at the end of each lecture will give students a guide to the additional readings they may want to carry out for deeper insights into the topics treated in the module</p>
<b>Further Information</b>	<p>The course is offered online. Lectures will be recorded.</p>
<b>Sustainable Development Goals (SDGs)</b>	<p>Good health and well-being, Clean water and sanitation, Affordable and clean energy, Climate action, Sustainable cities and communities, Responsible consumption and production, Reduced inequalities</p>