# Syllabus

## *Course Description*

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| **Course Title** | Sustainability Economics |
| **Course Code** | 27516 |
| **Course Title Additional** | |
| **Scientific-Disciplinary Sector** | SECS-P/05 |
| **Language** | English |
| **Degree Course** | Master in Data Analytics for Economics and Management |
| **Other Degree Courses (Loaned)** | |
| **Lecturers** | |
| **Teaching Assistant** | |
| **Semester** | Second semester |
| **Course Year/s** | 2 |
| **CP** | 6 |
| **Teaching Hours** | 36 |
| **Lab Hours** | - |
| **Individual Study Hours** | - |
| **Planned Office Hours** | 18 |
| **Contents Summary** | This course provides an applied and analytical overview of modern sustainability economics, emphasizing the use of econometric methods to evaluate environmental policies and quantify the value of environmental goods. Students will explore the economics of market failures and externalities, and learn how to assess the effectiveness of policy instruments such as pollution taxes, cap-and-trade systems, and regulatory standards. A core component of the course is the application of microeconometric techniques—such as revealed and stated preference models, discrete choice models, and property value regressions—to estimate willingness to pay, conduct cost-benefit analysis, and measure the impacts of environmental interventions. Through real-world data applications and case studies, students will gain the skills to critically analyze environmental outcomes and inform policy using empirical |

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| | evidence. |
| **Course Topics** | |
| **Keywords** | |
| **Recommended Prerequisites** | |
| **Propaedeutic Courses** | |
| **Teaching Format** | |
| **Mandatory Attendance** | Recommended, but not required. |
| **Specific Educational Objectives and Learning Outcomes** | Knowledge and understanding:<br>The student acquires specific knowledge of the economic and business domains of his/her interest and necessary to address decision-making and management issues in public and private organisations with an interdisciplinary perspective. In the Data Analytics for Economics pathway, knowledge will be oriented towards economic theory, economic analysis and econometrics through the development of micro- and macroeconomics, decision theory under conditions of uncertainty, time series analysis and forecasting techniques, methods for causal inference from both administrative and experimental data. Knowledge will also be oriented towards data analysis. In the Business Analytics track, the knowledge acquired will concern the tools necessary for analysing and interpreting business and organisational data, as well as business economic measurements, business models and their evolution, tools and techniques to support decision-making, performance measurement systems consistent with digitisation and sustainability processes, the governance of marketing processes, with particular regard to digital and interactive marketing and the impact of digitisation on marketing activities.<br><br>Aapplying knowledge and understanding:<br>Ability to analyse business issues that characterise data-driven decision support through the application of statistical and computational models.<br>Ability to use and apply models for market analysis and economic policy formulation.<br><br>Making judgements:<br>Master's graduates will have the ability to apply the acquired knowledge to interpret data in order to make directional and |

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| | operational decisions in an economic-business context.<br>Master graduates will have the ability to apply the acquired knowledge to support processes related to production, management and risk promotion activities and investment choices through the organisation, analysis and interpretation of complex databases.<br><br>Communication skills:<br>Master's graduates will be able to communicate effectively in oral and written form the specialised contents of the individual disciplines, using different registers, depending on the recipients and the communicative and didactic purposes, and to evaluate the formative effects of their communication.<br><br>Learning skills:<br>"MSc graduates should be familiar with the tools of scientific research. They will also be able to make autonomous use of information technologies to carry out bibliographic research and investigations both for their own training and for further education. In addition, through the curricular teaching and the activities related to the preparation of the final thesis, they will be able to acquire the ability<br>- to identify thematic connections and to establish relationships between methods of analysis and application contexts;<br>- to frame a new problem in a systematic manner and to implement appropriate analysis solutions;<br>- to formulate general statistical-econometric models from the phenomena studied. |
| **Specific Educational Objectives and Learning Outcomes (additional info.)** | |
| **Assessment** | |
| **Evaluation Criteria** | |
| **Required Readings** | |
| **Supplementary Readings** | |
| **Further Information** | |
| **Sustainable Development Goals (SDGs)** | |