

Course Descriptions None 2024-2025

Course Title Multi Criteria Analysis
 Course Code SSP4015
 ECTS Credits 1,0
 Assessment Pass / Fail

Period	Start	End	Mon	Tue	Wed	Thu	Fri
3	13-1-2025	26-1-2025	C				

Level Introductory/Intermediate
 Coordinator Filippo Oncini For more information: filippo.oncini@maastrichtuniversity.nl
 Language of instruction English

Goals After studying the SA skills course the students are able to:
 * Apply some widely-used methods/tools of sustainability assessment;
 * Discuss the strengths, weaknesses, and pitfalls of these methods/tools;
 * Reflect on the contribution of the methods/tools to a sustainability assessment.

Description In this Sustainability Assessment Skills (SAS) sub-course we focus on policy analysis and introduce a specific approach suitable for integrated sustainability assessments: Multi-criteria analysis (MCA). MCA is a method for evaluating multiple (conflicting) criteria in a policy context. This skills sub-course focuses on MCA, and critically evaluates its application to real-world sustainability problems. The course starts with an introduction lecture providing an overview on the field of and different approaches to policy analysis, and a brief introduction to the specific method of MCA. Throughout three tutorials, students will then deepen their understanding of the specific steps of an MCA (tutorial 1), jointly elaborate a design for MCA in relation to a real-world sustainability problem (tutorial 2), and apply the chosen design to a simulation game where students take the role of MCA facilitators and stakeholders (tutorial 3).

Literature - Runhaar et al. (2006). Policy analysis for sustainable development: The toolbox for the environmental social scientist. International Journal of Sustainability in Higher Education 7(1): 34-56. - Department for Communities and Local Government: London, (2009), Multi-criteria analysis: a manual, Wetherby: Communities and Local Government Publications. Only read chapter 6 (pp 46-72): https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7612/1132618.pdf - Participative multi-criteria analysis for the evaluation of water governance alternatives. A case in the Costa del Sol (Málaga) http://www.upo.es/ghf/giest/GIEST/publicaciones/573_Ecological_economics.pdf (Links to an external site.) - Combining participative and institutional approaches with multicriteria evaluation. An empirical study for water issues in Troina, Sicily <https://www.sciencedirect.com/science/article/abs/pii/S092180090001622> (Links to an external site.) - Multi-criteria analysis of heating sector sustainability in Northern Europe <https://www.sciencedirect.com/science/article/pii/S2210670721001165> - Application of Multi-Actor Multi-Criteria Analysis for Transition Management in Energy Communities <https://www.mdpi.com/2071-1050/13/4/1783> (Links to an external site.) - Stakeholder engagement and multi-criteria decision aiding in the electricity transmission grid <https://www.tandfonline.com/doi/full/10.1080/09640568.2017.1395317> - Value Measurement Analysis of Energy Tradeoffs in South Africa <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/9941/V.%20Prado%20%28et.%20al%29%20%20Value%20Measurement%20Analysis%20of%20Energy%20Tradeoffs%20in%20South%20Africa.pdf?sequence=1&isAllowed=y> (Links to an external site.) - A social multi-criteria evaluation of non-conventional water alternatives in Metropolitan Barcelona <https://www.sciencedirect.com/science/article/pii/S0959652611003519> (Links to an external site.) - A degrowth approach to urban mobility options: just, desirable and practical options <https://www.tandfonline.com/doi/full/10.1080/13549839.2022.2025769>

Prerequisites Exchange students should refer to the International Relations Office via email in case they would like to register for this course: iro-incoming-sbe@maastrichtuniversity.nl. Only limited spots available, first-come first-serve principle.

Keywords
 Teaching methods PBL / Lecture / Assignment / Groupwork / Skills

Assessment methods Attendance / Assignment

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation	Master Sustainability Science, Policy and Society - Business for Sustainability	Compulsory Skill(s)
	Master Sustainability Science, Policy and Society - Policy for Sustainability	Compulsory Skill(s)
	SBE Exchange Master	Master Exchange Courses