Course Descriptions None 2021-2022

Course Title	Sustainability Assessment Skills
Course Code	SSP4011
ECTS Credits	4,0
Assessment	Pass / Fail

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	30-8-2021	15-10-2021			X	X	
2	25-10-2021	10-12-2021	X				

Level: no level

Coordinator: Astrid Offermans For more information:a.offermans@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[1];
* Discuss the strengths, weaknesses, and pitfalls of these methods/tools;
* Reflect on the contribution of the methods/tools to a sustainability assessment.

[1] Basic modelling, Participatory methods, Multi criteria analysis, Scenario analysis

Description

Sustainability Assessment (SA) can be defined as a structured process dealing with a sustainability issue, using knowledge from various scientific disciplines and/or stakeholders, such that integrated insights are made available to decision makers. Applying SA in practice requires specific skills. The aim of this skills course is that students learn to apply some widely-used methods/tools of SA, and become familiar with its rules of application, strengths, and pitfalls.

The tools/ methods that will be discussed are: Participatory Methods, Introduction to Modelling, Scenario Analysis, and Multi-criteria analysis. Each method/ tool is organized in a sub-course/ module of 1 ECTS.

Participatory Methods
Stakeholder participation and citizen involvement are considered increasingly important in today's research and decision making. When dealing with complex issues such as sustainable development, it is unlikely that single actors have all the knowledge to properly define problems, to identify solutions, to assess these solutions and to evaluate the outcomes.
In this skills course you learn how to use Participatory methods in the different steps of a sustainability assessment trajectory. You will also learn to critically reflect upon the concept, and use, of participation. The emphasis of this course is on practicing skills that will make you feel more familiar and acquainted with the concept, and organization, of participation. After familiarizing yourself with some theoretical background knowledge, you will practice with developing a stakeholder analysis, developing a participatory process design, and the construction of a workshop script. At the end of the course you will organize and simulate a workshop session with your fellow students. You will use one or more participatory techniques to achieve the intended results.

Introduction to Modelling
A multitude of complex modelling approaches is currently used to assist in solving societal problems. After a general introduction to Integrated Assessment (IA) models, students are introduced to qualitative system dynamics modelling applied to a sustainability case. Students will practice using quantitative models as well. In this way the students develop an insight into the basic components, mechanisms, limitations and assumptions of which several contemporary IA models consist. The systems analysis and problem structuring skills that are required to be able to build models are useful skills to implement in other IA methods as well.

Scenarios
One of the core questions in sustainability science is ‘How can the future be scanned in a creative, rigorous and policy-relevant manner that reflects the normative character of sustainability and incorporates different perspectives?' (Swart et al 2004). This course offers insight and practical exercise in key foresight approaches such as trend analyses and scenario development.

Multi-criteria analysis
In this SAS sub-course we focus on policy analysis, what can be defined as an action-oriented or intervention-oriented activity, which examines what policy or different policy options achieve, given a set of goals. Policy analysis can contribute to Sustainability Assessment (SA), and in particularly the 3rd step of SA: the assessment of policy options for a policy problem. MCA is a method for evaluating multiple (conflicting) criteria in a policy context. The idea is that structuring complex problems well and considering multiple criteria explicitly leads to more informed and better decisions. This SAS sub-course focuses on MCA, and critically evaluates its application to real-world sustainability problems.

Literature	
Prerequisites	
Keywords	
Teaching methods	Presentation / Lecture / Groupwork / Skills / Coaching
Assessment methods	Participation / Assignment / Presentation
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	Compulsory Skill(s)