Course Descriptions Master 2022-2023

Course Title Basic Modelling
Course Code SSP4013
ECTS Credits 1,0
Assessment Pass / Fail

Period Period Start End Mon Tue Wed Thu Fri

5-9-2022 21-10-2022 X

Level no level

Coordinator Bram Oosterbroek For more information:bram.oosterbroek@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

PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S)
USED IN THIS COURSE IS WITH RESERVATION. A RE-EMERGENCE OF THE CORONAVIRUS AND
NEW COUNTERMEASURES BY THE DUTCH GOVERNMENT MIGHT FORCE COORDINATORS TO
CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE
INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE
COURSE SYLLABUS.

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.

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.

Literature Prerequisites Keywords

Teaching methods

Assessment methods
Evaluation in previous academic

year

This course belongs to the following programme / specialisation

For the complete evaluation of this course please click http://iwiosbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

Master Sustainability Science, Policy and Society Compulsory Skill(s)