

# Course Descriptions Master 2020-2021

Course Title Sustainability Science  
 Course Code SSP2031  
 ECTS Credits 5,0  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	31-8-2020	16-10-2020		X			X

Level no level  
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 Language of instruction English

Goals

- \* to understand the social element in the dynamics of problem definitions
- \* to use theories and methods of problem structuring
- \* to understand processes of research use
- \* to name and understand different roles of scientists in complex problems and their suitability in different contexts
- \* to explain the theories and concepts of sustainability science
- \* to understand the concept of boundary work: its challenges and relevance in sustainable development
- \* to recognize and reflect on ethical and normative aspects of sustainability science for policy making

Description

In matters of sustainable development, policy making and knowledge production are entangled in many ways. Policy makers, for instance, will need scientific knowledge to justify and target their plans. Likewise, scientists hope to make their findings about sustainability useful and to inform policy makers. In this course we will investigate the various ways in which scientific knowledge production and policy making are intertwined or clash. Starting from the angle of policy, we will look into the nature of policy problems, which, in the case of sustainable development, often are ill-structured and open ended. From the angle of science, we will consider the different strategies open to scientists to make their knowledge useful. Attention will also be given to the ways in which the science 'system' is changing, in particular the shift from normal or mode-1 science to post-normal or mode-2 science. This raises pertinent questions about what knowledge is in the first place and its role in solving policy problems characterized by dissent and uncertainty.

Sustainability science is aimed at understanding and generating useful knowledge through problem-focused analysis, integration, attention to cross-scale dimensions of human-environment interactions and boundary spanning at the interface of research and practice. In the course, students will learn about boundary work at the interface of science and society and sustainability science as an emerging field of science.

Some questions that will come up in the discussions:

- \* What strategies do scientists have to make their knowledge useful and can they prevent misuse of their science?
- \* Does more information always help to make better decisions?
- \* Should science compel action, for instance when new facts about the severity of climate change are uncovered?

Literature

Prerequisites

Keywords

Teaching methods

Assessment methods

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 Course(s)