Course Descriptions None 2023-2024

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

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	4-9-2023	20-10-2023		X			X

Level	Introductory/Intermediate
Coordinator	Annemarie van Zeijl-Rozema, Ron Cörvers For more information:a.vanzeijl@maastrichtuniversity.nl; r.corvers@maastrichtuniversity.nl
Language of instruction	English
Goals	* Students recognise, analyse and explain social, ethical and normative aspects of sustainability science for policymaking (social complexity, multiple actors, fact-value distinction, perspectives, framing, decision making) * Students recognise, analyse and explain theories and concepts of sustainability science (social environmental system, post-normal science, problem types, problem structuring, integrated approach, transdisciplinary approach, problem-driven science, linking knowledge to action) * Students recognise, analyse and explain the relationships between science and society (linear model of science, stakeholder/geological model of science, contract between science and society, credibility cycle of science, uncertainty, boundary work, boundary organization, boundary objects, salience, credibility, and legitimacy of knowledge), and the roles scientists can play in these relationships when dealing with sustainability problems in different contexts (pure scientist, (stealth) issue advocate, science arbiter, honest broker) Students apply the following to a case study: * theories and concepts of sustainability science, * social, ethical and normative aspects of sustainability science for policy making * the relationships between science and society and the roles scientists can play in these relationships when dealing with sustainability problems in different contexts
Description	In the 1990s sustainability science emerged as a new field of science. Sustainability science is aimed at understanding and generating useful knowledge about sustainability problems through problem-focused analysis, integration, attention to cross-scale dimensions of human-environment interactions and boundary spanning at the interface of research and practice. This course investigates the field of sustainability science and in particular addresses the role of academic knowledge at the interface of science, society and policy. Understanding sustainability problems and different perspectives of problem understanding and problem solving will be discussed. In matters of sustainable development, policy making and scientific knowledge are entangled in many ways. Policy makers, for instance, will need scientific knowledge to justify and target their plans. Likewise, scientists hope their findings about sustainability are useful to society and will inform policy makers. In this course we will investigate the various ways in which sustainability science, society 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' to post-normal or transdisciplinary science. This raises pertinent questions about what knowledge is in the first place and its role in solving societal and policy problems. We will see that policy makers often want to know things that science cannot offer. An example is knowledge about creating acceptance of certain forms of steering. This is knowledge that science cannot provide, for the simple reason that acceptance of policy cannot be created through specialist knowledge. Neither can science resolve normative issues about abortion or the right to interfere with the earth's climate. When dealing with the future, the limits of knowledge become even greater. Furthermore, problem definitions may change over time, thanks to new actors and alternative ways of framing. This course will help to appreciate that "science does not compel action", that "science does not speak with one mouth", that facts and values are intertwined and that uncertainty is a constitutive element of knowledge. Different types of problems require different types of problem solving approaches. Only structured problems can be tackled through calculation and rule. In paying attention to issues of "puzzling and powering" in problem solving, the course prepares students for later work as sustainability professionals within government, business, science or intermediary organisations.
Literature	
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
Assessment methods	Written Exam / 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 Course(s)
Master Sustainability Science, Policy and Society - Policy for Sustainability	Compulsory Course(s)
SBE Exchange Master	Master Exchange Courses