Course Descriptions NonDegree 2023-2024

Course Title	Systems Thinking Competency
Course Code	EBS2074
ECTS Credits	2,5
Assessment	Pass / Fail

Period

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

Level	Intermediate/Advanced
Coordinator	Ceren Pekdemir For more information:ceren.pekdemir@maastrichtuniversity.nl
Language of instruction	English
Goals	Students are able to: * understand the main concepts of systems thinking (including systems dynamics and mental models); * create a systems diagram on a chosen social-environmental system; * reflect on one's self within the (social-environmental) system; * reflect on one's own experience with systems thinking during in-class exercises.
Description	A core competency for contributing to sustainable development is systems-thinking. Systems consist of 1) elements or parts, 2) interconnections (the way these characteristics relate to and/or feed back into each other), and 3) a function or purpose (Meadows, 2008). Systems can be simple or complex when they range across domains (environmental, economic, social, etc.) and scales (local to global). Systems thinking starts from an understanding of what systems are and the subsequent ability to analyze systems. A good understanding of the main facets of systems and of how systems work is of particular importance for thinking and acting in favor of sustainable development, as for instance intervention points can be identified, future trajectories anticipated, and for building transition strategies. This skills course runs in parallel with the course Sustainability and Social-Ecological Systems. In both of these courses students will get acquainted with the core concepts of systems thinking (including system dynamics and mental models). Where this skills course clearly deviates is that students will experience and learn about the core concepts of systems thinking through in class exercises and games, and apply the concepts to a case in their present live to also understand the place of the self within a system. The focus on (in-class) exercises is intended to stimulate discovery and confirmation of the main principles underlying systems thinking theory.
Literature	Thinking in Systems: A Primar – D. H. Meadows, 2015. Reference list will be provided.
Prerequisites	None
Keywords	
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork / Skills
Assessment methods	Final Paper / Attendance
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

UM-wide minors	Minor Sustainability
SBE Non Degree Courses	Minor Sustainability