

SEEP SYLLABUS

Course title:	Natural sciences (optional bridging course)			
Teacher(s):	Hanja Pisa, MSc.			
Course credit:	ECTS: -		Hours per week: 2	
Semester	<input type="checkbox"/> S1	<input type="checkbox"/> S2	<input type="checkbox"/> S3	<input type="checkbox"/> S4
Expected prior knowledge	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No	
Teaching method(s):	<ul style="list-style-type: none"> • Input by lecturer • Discussions and reflections • Short student presentations (no homework) 			
Type(s) of evaluation:	<input type="checkbox"/> Exam		<input type="checkbox"/> Written report	
	<input type="checkbox"/> Participation / Presentation		<input type="checkbox"/> Group project	
	<input type="checkbox"/> Other	<input type="checkbox"/> None		
Short course description	<p>Economy and society are embedded in biophysical systems, to which this course serves as an introduction, recap and overview. The following topics will be covered:</p> <ul style="list-style-type: none"> • Interdependent Systems: Humans in the Environment • Planet Earth: Lithosphere, Hydrosphere, Atmosphere, Biosphere • Planetary Boundaries • Carbon Cycle, Global Warming, Tipping Points and IPCC • Ecosystems, Biodiversity • Thermodynamics • Mathematical Foundations and Exponential Growth • Evolution and Co-Evolution • Complexity, Mathematics, and Model Building in Economic and Social Sciences 			
Topics (summary keywords)	atmosphere, ecosystems, growth, thermodynamics, biophysical boundaries			
Selected readings:				