



## COURSE UNIT DESCRIPTION

Course unit title	Course unit code
Imagining the future	

Name of lecturer	Department
Raphael Coutin, Auste Valinciute	Life Sciences Center

Study cycle	Course unit level	Course unit type
Bachelor's students		Optional

Study method	Semester	Language of instruction
Face-to-face lectures and seminars	Fall	English

Requirements for students	

ECTS credits	The entire student workload	Contact hours	Self-learning hours
5	125	48	77

Aim of the module (course unit): competences foreseen by the study programme		
<p>Students from various disciplines in science, technology, social sciences and humanities are invited to apply. The goal of this course is to introduce contemporary hypotheses on natural, man-made and technological global catastrophic risks and engage students in creative and collaborative exercises for seeking out innovative solutions to challenges that face humanity in the 21<sup>st</sup> century.</p> <p>This course combines science, philosophy, design and principles of foresight studies to offer a transdisciplinary approach for exploring ideas that mitigate threats to human species such as global warming, world population/ agricultural crisis and rogue biotechnology.</p> <p>This course will develop analytical thinking, critical thinking, teamwork, creativity and other transferable competencies.</p>		
Learning outcomes of the module (course unit)	Teaching/learning methods	Assessment methods
Students will be able <b>to synthesize</b> knowledge from science and humanities for understanding and critically reasoning about the current global risks for humanity and well as the social and global influences of modern technologies.	Lectures, seminars/literature analysis, group discussions	Observation of skills in practice, group project
Students will learn <b>to apply</b> futures techniques and design methods in practice.	Lectures, seminars/literature analysis, group work	Observation of skills in practice, group project
Students will be able <b>to invent</b> transdisciplinary solutions that address a potential or a real-world manifestation of a global catastrophic risk, such as climate change.	Group work	Group project

Themes	Contact work hours							Time and tasks for individual work	
	Lectures	Consultations	Seminars	Practical work	Laboratory work	Placements	Total contact work	Individual work	Tasks
Introduction to the course	1								
Doomsday: between science, fiction and morality	2		2						Reading, group discussions
Historical perspectives on technological innovations	1		1						Reading, group discussions
Futures techniques: forecasting methods for predicting the future			4						Reading, group discussions, practical exercises
Scenarios for the end of the world I: anthropogenic sources of global risks	4								Reading, group discussions
Scenarios for the end of the world II: natural sources of global risk	4								Reading, group discussions
Social perceptions of risk: cognitive processes, biases and external factors that influence risk perceptions and judgments.	2		2						Reading, group discussions
Design methods for innovations	2		4						Reading, group discussions, practical exercises
Social impacts of innovations	2								Reading, group discussions
Group project	1			16					Practical work
<b>Total</b>	<b>21</b>		<b>11</b>	<b>16</b>			<b>48</b>	<b>77</b>	

Assessment strategy	Weight in %	Deadlines	Assessment criteria
Group project	100	End of semester	<p>Students work in groups on projects in which they prepare the concepts of an innovative solution to one of the global risks addressed in class lectures. Group project outcomes are presented and exhibited at the Vilnius University Life Sciences Center.</p> <p>Assessment criteria:  Project is turned in (1 point)  Project research (3 points)  Project concept (3 points)  Project exhibition (3 points)</p>

Author	Year of issue	Title	No of periodical or volume	Place of printing. Printing house or internet link
<b>Compulsory literature</b>				
Nick Bostrom, Milan M. Cirkovic (Eds.)	2011	Global Catastrophic Risks		Oxford University Press, USA
Robin Fears	2017	Assessing the Security Implications of Gene-editing Technologies		InterAcademy Partnership
Paul Slovic, Baruch Fischhoff, Sarah Lichtenstein	1981	“Facts and Fears: Societal Perception of Risk” in <i>Advances of Consumer Research</i>	8	Association for Consumer Research
Elizabeth Kolbert	2014	The Sixth Mass Extinction		Bloomsbury
Sandra Díaz, Josef Settele, Eduardo Brondizio et al.	2019	Summary for policymakers of the global assessment report on biodiversity and ecosystem services – unedited advance version		IPBES
Larry Leifer, Hasso Plattner, Christoph Meinel (Eds.)	2014	Design Thinking Research: Building Innovation Eco-Systems		Springer
Isaac Asimov	1951	The Foundation Series		Gnome Press