

Title of the course:	Environmental Science for resilient future		
Course ID:	VE-NPT035		
Level of education:	Erasmus	Academic semester:	Spring
Professor's name:	Dr. Péter Práczki	Academic title:	
Hours per semester:	26	Credits:	4
Exam:	Written exam	Pre-requisites:	Management

Aims of the course

"The important thing is not to stop questioning. Curiosity has its own reason for existing."

- Albert Einstein -

Since the first industrial revolution, the growth of humanity has resulted in the worldwide expansion of endless short-sighted economic activities. Environmental pollution started to be more and more significant, due to the huge expansion of unsecured financial activities and socially unnecessary commodities production. Furthermore, as agriculture became more and more intensive to feed the increasing population, ecosystems are continuously and globally destroyed. Humanity therefore needs to face a fast turnaround towards a new resilient economy. The global economic, energy, and pandemic crisis, climate change, natural disasters, migration and water & food shortage are all unsolved expressions of modern capitalism. One need to understand that the tackling of the biggest human global challenges, like surveillance capitalism, artificial intelligence, pandemics, nuclear weapons proliferation, armed conflicts etc. These global issues can only be solved now and in the future based on resilient international political, economic and cultural agreements and mutual understanding. One aim of the course is to interpret the World environmental, social and economic development and recognize that environmental viability depends on the maintenance and sustainable use of healthy ecosystem resources and human resilient reasoning. The course also discusses what we can do personally to implement these ecological and societal processes.

Scope of the course

"It is the responsibility of intellectuals to speak the truth and expose lies."

- Noam Chomsky -

The course reviews various environmental topics and student's interactive participation will be highly valued. In addition to the student's professional preparations, the course does not only focus on deepening the investigated environmental contents, but also increases the student's reasoning ability (thesis, antithesis, synthesis), based on group-conversations in English. An important part of the course is to increase the students' self-confidence in the field of interactivity. Each student will have to perform an environmentally pre-selected presentation; which subject will be then discussed - based on assertive communication skills - by all participants. Each student's presentation will also address - in some slides - how the presented environmental issue is handled in their own country. At the end of the course, students receive their grade based on a self-assessment, therefore no oral examination is required.

The course is also paying attention on student's innovative contributions, which brings new ideas to the course development. Another idea of the course is to better understand our environment, and improve student's ability and skills to explore it.

The involvement of the course is to discover the biggest environmental issues, to explain the pros and cons of its development and to draw conclusions which can be constructive for the entire society. The beginning of wisdom is doubting, so the most important method in order to achieve this, is to prioritize on creativity and critical thinking. It is important that students meet different professional experts and get to know some environmental practical results achieved. Therefore, some events take place off campus.

Course outline

1. Presentation, ecology and environmental studies
2. Climate change / Global warming
3. World oil supply and the future of fossil resources
4. World population growth, demography and environment
5. Agriculture, food & farming solutions, see Cowspiracy - The Sustainability secret (movie)
6. Pandemics, global societal and environmental effects
7. Sustainable urban development / discussion with András Ekés - director Mobilissimus Co.)
8. Renewable energy resources - global solutions, innovations and mobility
9. Circular economy, ESG, The Great Reset and other societal and economical alternatives
10. Degrowth (non- ecological alternatives / discussion with M. Vincent Liegey (French Degrowth Alternative)
11. The scale & urgency of pollution cuts (visit to Rákospalota Waste Recovery Plant)
12. Media, mainstream and alternative media, fake news, misleading information, mass psychosis
13. Future and Artificial Intelligence, surveillance capitalism, robotics and environment

Requirement and assessment

Interactive participation on sessions		40%
Thematic presentations		40%
Innovative contribution (adding new ideas to the course)	20%	

Compulsory readings

Erich Fromm, (1956): The Art of Loving, Harper and Brothers, USA, NY
Rosenberg M. B. (1999): Nonviolent Communication... A Language of Compassion, PuddleDancer Press, USA

Recommended readings

Acemoglu, D.-Robinson J. A. (2012): Why Nations Fail, Crown Business, New York
Alter A. (2014): Drunk Tank Pink: And Other Unexpected Forces That Shape How We Think, Feel and Behave, Penguin Books, New York

Bakas A.-Creemers, R. (2010): Living Without Oil. Infinite Ideas Limited, United Kingdom
Bostrom Nick. (2014): Superintelligence, Oxford University Press
Demset M. (2022): The Psychology of Totalitarianism, International Kindle Paperwhite, New York
Duffy B. (2018): The Perils Of The Perception, Atlantic Books, London
Joy M. Ph.D. (2010): Why We Love Dogs, Eat Pigs, And Wear Cows, Conari Press, San Francisco
Kip Andersen – Keegan Kuhn (2004): Cowspiracy - The Sustainability secret (movie)
Goleman, D.(2009): Ecological Intelligence. Penguin Random House, USA
Gore, A. (2006): An Inconvenient Truth. Butler and Tanner Ltd. Great Britain
Hopkins, R. (2008): The Transition Handbook. Green Books Ltd., Totnes
Kohn A. (1986): No Contest, Houghton Mifflin Company, New York
Kolbert, E. (2014): The Sixth Extinction. Henry Holt and Co., New York
Ford M. (2015): The Rise of the Robots, Basic Books, New York

Fromm, E. (1956): The Art of Loving, Harper & Brothers, New York
Latouche, S. (2004): Degrowth Economics. Le Monde Diplomatique, November, France
Liegey V.: (2013) *Un projet de décroissance. Manifeste pour une dotation inconditionnelle d'autonomie*, Utopia, France
Lovins, A. (2013): Reinvent Fire. Rocky Mountain Institute, USA
Vance A. (2015): Elon Musk, Penguin Random House, London
Mayer V.-Cukier S. K. (2013): Big Data, Houghton Mifflin Harcourt Publishing Company, Boston
Paarlberg R. (2010): Food Politics, Oxford University Press
Randers, J. (2012): 2052. A Global Forecast for the Next Forty Years. Chelsea Green Publishing, USA
Rosenberg M. B. (2003): Life-Enriching Education, PuddleDancer Press, USA
Yuval Noah Harari (2014): Sapiens - A Brief History of Humankind. Clays Ltd. Great Britain
Yuval Noah Harari (2016): Homo Deus - A Brief History of Tomorrow. Great Britain
Yuval Noah Harari (2018): 21 Lessons for the 21th Century. Penguin Random House, Great Britain