



TITLE OF THE COURSE:	Human ecology
Course code:	APL3005
Course group:	C
Faculty:	Natural Sciences
Study program:	Environmental Science
Level:	<i>Bachelor</i>
Semester:	<i>Spring</i>
ECTS credits:	5
Language of instruction	English
Course lecturer/s:	Asta Danilevičiūtė
Short course description:	<p>The course is designed to gain the knowledge and practical skills related to the human population and environmental interaction, the impact of humans on the environment, emphasizing the sociological, and ecological consequences of human population growth, environmental hazards, health effects of environmental and occupational factors and the basic requirements for a healthy environment and to develop students' skills to recognise the ecological problems. The course focuses on practical assessment of biological, chemical and physical hazards risks and its effects on health. The skills that participants will develop information retrieval, ecological risk recognition and EPI-info statistical package usage for health risk assessment.</p>
Course content:	<p>Introduction to human ecology. Social system and ecosystem interaction. Population and Feedback Systems. Positive feedback. Negative feedback. Population Regulation. History of the human population. Social mechanisms of population regulation. Demographic explosion and quality of life. Structure of ecosystems. Coadaptation. Ecosystem design. Ecosystem Homeostasis. Human social systems and ecosystem coevolution and coadaptation. Sustainable human – ecosystem interaction, unsustainable human - ecosystem interaction.</p>



	<p>Urbanization in human ecology. Impact of urban environment on human health.</p> <p>Human impact on atmosphere, hydrosphere and lithosphere.</p> <p>The human environment and its impact on health.</p> <p>Environmental health hazards and human health indicators.</p> <p>The most important requirements for a healthy environment and health: air quality, safe water, safe housing and a stable global environment.</p> <p>Physical hazards and its effects on health.</p> <p>Environmental pollution, ionizing and non-ionizing radiation and its effects on health.</p> <p>Chemical and biological factors and its effects on health. Infectious disease history.</p> <p>New infections. Epidemic diseases. Metabolism of pollutants. Factors Determining Disease Prevalence.</p> <p>Food quality and health. Risk reduction options for biological and chemical food contamination.</p> <p>Environment and occupational health. Prevalence and of occupational diseases. Psychosocial factors at work and its effect on health.</p> <p>Non-infectious diseases caused by environmental factors. Integrated business management and risk reduction.</p> <p>Global health issues, health problems caused by climate change.</p> <p>The role of environmental health professionals.</p>
<p><i>Grading and evaluating student work in class and/or at the final exam:</i></p>	<p>Assessment of open and closed questions in writing, performed laboratory work and preparation of presentation.</p>
<p><i>Required reading and additional study material</i></p>	<p>Gerald G. Marten. Human Ecology - Basic Concepts for Sustainable Development</p> <p>Chubnik MP, Abramova RN, Bolsunovskaya LM, Baranova AV, Gutareva NYu. Human ecology</p> <p>WHO. Health Impact of Psychosocial. Hazards at Work: An Overview</p> <p>WHO. Health and Environment Linkages Initiative. http://www.who.int/</p> <p>US Environmental Protection Agency https://www.epa.gov/</p> <p>The Organisation for Economic Co-operation and Development www.oecd.org/health</p>
<p><i>Additional information (if applicable)</i></p>	