



Module name	Environment and Sustainable Development (Science Modul)
Module leader/Coordinator	Anna Klimentova
Academic staff (teachers)	
ECTS Credits	5 ECTS
Duration	13 weeks
Form of learning	<i>Lectures, seminars, workshops...</i>
Indicative workload	36 contact hours, 89 h independent study (120 h)
Module aims	<ol style="list-style-type: none"> 1. To explain and describe some science concepts and theories which have importance for sustainable development 2. To promote new patterns of behavior, to shape attitudes, values, and beliefs about the environment in global dimension 3. To recognize the threats of modern civilization and taking responsibility for future society and state of environment 4. To build awareness of the child as a person who manage to undertake the protection of environment 5. To develop respect for regional, ethnic, and national communities
Generic competences	<ol style="list-style-type: none"> 1. To develop the knowledge of the relevant subject areas 2. To distinguish features which unify Europeans and European education 3. To improve intercultural skills 4. To develop critical and creative thinking 5. To develop aptitudes for reasoning and a solution-orientated way of thinking 6. To develop tolerance
Specific competences	<ol style="list-style-type: none"> 1. To recognize, describe and explain the phenomena that occur between human activity and the environment. 2. To analyze situations and evaluate the state of the environment on the basis of observation, experiment and measurement. 3. To take reasonable steps to improve the environment at the local, regional, national and global level. 4. To develop interdisciplinary approach to environmental problems. 5. To be aware of science as a part of culture capable of changing society and social development.

Learning and teaching approach	Lectures, seminars, investigations, debates, field trips and group work with different content.
Content	In the course the political, cultural, economic, social and ecological aspects on environmental issues are put up for discussion. Important topics are: <ol style="list-style-type: none"> 1. demographic processes 2. ecological concepts 3. human basic needs and its influences on the environment 4. multicultural society 5. historical dimensions of civilizations 6. economy on macro, meso and micro levels 7. ethical issues in the discourse of sustainable development 8. science/technology versus philosophical perspectives
Level	First cycle degree
Obligatory requirements	English B2
Status	Obligatory
Learning outcomes	<ol style="list-style-type: none"> 1. To use science concepts, models and theories which have importance for the ability to explain and reason about sustainable development 2. To plan and carry out investigations, record the results in various forms and explain them by using appropriate terminology 3. To explain the relationship between the natural environment and the historical heritage of the region/country 4. To justify the need for a rational human and social satisfaction as a condition for sustainable development 5. To discuss the technological possibilities/consequences for sustainable development 6. To be familiar with different types of hazards in contemporary society which are results of human activities. 7. To transform some parts of the content into teaching units
Form of assessment	<ol style="list-style-type: none"> 1. Student evaluation: the elaboration of three tasks in a personal portfolio <ul style="list-style-type: none"> • Investigate and present an ecological concept connected to basic understanding of natural processes such as energy, pollution or waste management. Oral presentation and essay. • To put this ecological concept in a social and economic context. Oral presentation and essay. • To elaborate the chosen content into teaching material that could be used in the educational process. Hands-on presentation of material and work sheet. 2. Group evaluation: two tasks where the first one is at the

	<p>beginning and the second one in the end of the course.</p> <ul style="list-style-type: none"> • Will prepare a presentation on cultural, natural and historic resources of the region. Multi-media presentation. • The region presentations will be developed and transformed into an educational unit. The meso level and macro level of ecological, social and economic aspects of sustainable development must be integrated in the presentation.
Learning units	<i>Fill only content units in the template; describe the content of the module apart in max. 2-3 pages</i>
Literature	<ol style="list-style-type: none"> 1. Azevedo, B. (2010) Renewable energies. Porto; Atelier Nunes e Pã editor 2. Capra F. (2002). <i>The Hidden Connections. A Science for Sustainable Life</i>. London: Harper Collins 3. Diamond J. (2006). Kollaps 4. Dorf, R.(2001). <i>Tecnology, Humans, and Society – Toward a Sustainable World</i>. California Academic Press 5. http://www.project2061.org/publications/earlychild/online/Default.htm Dialogue on early childhood science, mathematics, and technology education. 6. Palmer J. A. (1998). <i>Environmental education in the 21th century. Theory, practice and promise</i>. London, New York,. Routledge 7. <i>The Sustainable Everyday Project</i> is a platform of knowledge and actions for creative communities and innovative citizens. It proposes a catalogue of promising cases, a lab of scenarios-in-progress and a program of travelling exhibition to stimulate the social conversation towards a more sustainable future. http://www.sustainable-everyday.net/SEPhome/home.html#scenarios 8. UNESCO's <i>Teaching and learning for a sustainable future</i>, A multimedia teacher education programme, UNESCO 2002 (available free of charge from UNESCO in Paris) http://www.unesco.org/education/tlsf/
Grading	ECTS grades according to ECTS guidelines
Other information	
Internet address of the program	