

COURSE DESCRIPTION CARD – SPECIMEN

Faculty of Civil Engineering and Environmental Sciences									
Field of study								Degree level and programme type	
Specialization/ diploma path								Study profile	Academic profile
Course name	Land rehabilitation							Course code	IS-FCEE-00026S
								Course type	Erasmus
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	summer
	15			15				No. of ECTS credits	3
Entry requirements	Basic knowledge of chemistry, cartography and soil science								
Course objectives	Acquaint the students with forms of soil degradations and methods of soil rehabilitation and protection.								
Course content	<p><u>Lectures:</u> Forms of soil degradation such as salinization, desertification, acidification, organic depletion, compaction, nutrient depletion, chemical contamination, deterioration by mining. Water, gully, gravity and wind erosion. Water erosion control. Wind erosion control. Shelterbelts and riparian zones.</p> <p><u>Project:</u> Methods of water and wind erosion mapping. Land rehabilitation project. Mathematical modelling of erosion processes.</p>								
Teaching methods	lecture, presentations, projects, calculations								
Assessment method	test, project								
Symbol of learning outcome	Learning outcomes							Reference to the learning outcomes for the field of study	
LO1	knows and understands the threats to the soil environment							K_AK1_W05	
LO2	knows and understands methods to prevent soil degradation							K_AK1_W05	
LO3	knows and understands methods of land rehabilitation							K_AK1_W05	
LO4	can perform an inventory of soil hazards							K_AK1_U03	
LO5	can counteract soil degradation							K_AK1_U03	
LO6	can develop a concept of land reclamation							K_AK1_U03	
Symbol of learning outcome	Methods of assessing the learning outcomes							Type of tuition during which the outcome is assessed	

L01	Test	L
L02	Test	L
L03	Test	L
L04	Project	P
L05	Project	P
L06	Project	P
Student workload (in hours)		No. of hours
Calculation	attendance to lectures	15
	attendance to projects	15
	preparation for test	10
	preparation of projects	35
	attendance to tutorials	5
	TOTAL:	80
Quantitative indicators		HOURS
Student workload – activities that require direct teacher participation		35
Student workload – practical activities		50
Basic references	<ol style="list-style-type: none"> 1. Pennock D., 2019. Soil erosion: the greatest challenge for sustainable soil management. Food and Agriculture Organization of the United Nations, Rome 2. Mauser H. 2013. Soil remediation and rehabilitation. Treatment of contaminated and disturbed land. Environmental Pollution 23. Springer Science+Business Media Dordrecht 3. Osman K.T., 2014. Soil degradation, conservation and remediation. Springer Science+Business Media Dordrecht 	
Supplementary references	<ol style="list-style-type: none"> 1. Patill R.J., 2018. Spatial techniques for soil erosion estimation. Remote sensing and GIS approach. Springer Briefs in GIS, Springer International Publishing AG, part of Springer Nature 2018 	
Organisational unit conducting the course	Department of Agri-Food Engineering and Environmental Management	Date of issuing the programme
Author of the programme	dr inż. Agnieszka Wysocka-Czubaszek	04.03.2021

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work,

S – seminar