

**COURSE DESCRIPTION CARD**

Faculty of Civil Engineering and Environmental Sciences									
Field of study								Degree level and programme type	
Specialization / diploma path								Study profile	
Course name	Forest botany: Dendrology							Course code	IS-FF-00032W/S
								Course type	Erasmus
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	summer or winter
	15			20				No. of ECTS credits	4
Entry requirements	Ecology								
Course objectives	Knowledge on diversity of trees and shrubs species growing in the forests and used for green areas. Properties of ecological habitat requirements, morphology, the role in forest ecosystems and possibilities of the use of trees and shrubs on green areas. Education of practical skills to recognize and identification of different species and forms of trees and shrubs. Education how to select trees and shrubs, depending on natural conditions, expected results, effects and needs.								
Course content	Taxonomy and nomenclature of woody plants. Morphology, anatomy and physiology of trees and shrubs. Coniferous as well as deciduous trees and shrubs: a systematic review of species diversity, distinctive features, environmental characteristics, habitat requirements, values, propagation and cultivation. Rules practical identification of species, varieties and forms of trees and shrubs. Deciduous trees and shrubs as part of the garden composition. Ecology of trees and shrubs and role of different species in forest ecosystems								
Teaching methods	Lecture, exercises, presentation								
Assessment method	Lecture - written tests; project - project and report evaluation								
Symbol of learning outcome	Learning outcomes							Reference to the learning outcomes for the field of study	
LO1	The student knows the rules of nomenclature of plants							L1P_W05	
LO2	The student has knowledge on the diversity, structure and functions of trees and shrubs							L1P_W05	
LO3	Student knows the characteristics, needs and values trees and shrubs							L1P_U02, L1P_U04	
LO4	Student is able to identify the species, forms and varieties of trees and shrubs							L1P_U02	
LO5	Student knows how to select trees and shrubs, depending on the conditions and needs							L1P_U02	
LO6	Student can use trees and shrubs in different habitat conditions							L1P_U01, L1P_U02	
Symbol of learning outcome	Methods of assessing the learning outcomes							Type of tuition during which the outcome is assessed	

L01	final test for lectures, project and reports evaluation	L, P	
L02	final test for lectures, project and reports evaluation	L, P	
L03	final test for lectures, project and reports evaluation	L, P	
L04	project and reports evaluation	P	
L05	project and reports evaluation	P	
L06	project and reports evaluation	P	
<b>Student workload (in hours)</b>		<b>No. of hours</b>	
<b>Calculation</b>	Participation in the lectures	15	
	Participation in the project classes	20	
	Participation in consultations	15	
	Preparation of projects and reports	20	
	Preparation for passing the final test	15	
	<b>Total:</b>	85	
<b>Quantitative indicators</b>		<b>Hours</b>	<b>No. of ECTS credits</b>
<b>Student workload – activities that require direct teacher participation</b>		50	2
<b>Student workload – practical activities</b>		45	1,8
<b>Basic references</b>	Johnson O., More D. Collins Tree Guide.		
<b>Supplementary references</b>	1. Seneta W., Dolatowski J. Dendrologia. Wyd. Naukowe PWN, Warszawa, 2008 [in Polish]. 2. Bugała W. Drzewa i krzewy. PWRiL, Warszawa, 2000 [in Polish].		
<b>Organisational unit conducting the course</b>	Faculty of Civil Engineering and Environmental Sciences	<b>Date of issuing the programme</b>	
<b>Author of the programme</b>	Dan Wołkowycki, PhD	01.03.2020	

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