

A COURSE SYLLABUS – DOCTORAL SCHOOL
REGARDING THE QUALIFICATION CYCLE FROM 2020 TO 2024 AND FROM 2021 TO 2025

GENERAL INFORMATION ABOUT COURSE				
Course title	Trees, groves, and woods in agricultural landscapes			
Name of the unit running the course	Szkoła Doktorska w Uniwersytecie Rzeszowskim			
Type of course (<i>obligatory, optional</i>)	Przedmiot obowiązkowy fakultatywny (specjalistyczny) do wyboru			
Year and semester of studies	2022/2023; semestr III i V			
Discipline	Agriculture and Horticulture			
Language of Course	English			
Name of Course coordinator	Dr hab. inż. Andrzej Bobiec prof. UR			
Name of Course lecturer	Dr hab. inż. Andrzej Bobiec prof. UR			
Prerequisites	—			
BRIEF DESCRIPTION OF COURSE (100-200 words)				
<p>The goal of the subject is to present selected aspects of dendroflora, specific for the traditional rural landscapes. They consist of, among the others, groves and copses, semi-open woods, solitaire and veteran trees, coppice woods, and pollarded trees. Contemporary, almost entire interest in trees and dendroflora concentrates on the forest habitats that are shaped by conventional, European model of forestry, or by spontaneous natural processes that occur in protected areas. Such a perspective imposes considerable limitations on insight and understanding of the functioning of woody plants, including so-called "forest trees". The classes will present evolutionary adaptations of selected species of trees, securing them successful performance outside typical forest habitats. In particular, regeneration niches of native tree species, with respect to various forms of past and present land use, including conservation, will be presented. As a special case, the state-of-the-art knowledge of the pedunculate oak regeneration niche and its place in Central European landscapes will be presented.</p>				
COURSE LEARNING OUTCOMES AND METHODS OF EVALUATING LEARNING OUTCOMES				
Learning outcome	The description of the learning outcome defined for the course	Relation to the degree programme outcomes (symbol)	Learning Format (Lectures, classes,...)	Method of assessment of learning outcomes (e.g. test, oral exam, written exam, project,...)
Knowledge (no.)	(Knows and understands)			
1	Understanding of rural economy as a source of ecological disturbances influencing the lives of trees and shaping treed habitats.	P8S-WG/1 P8S-WG/2	Lectures, classes	conversation
2	Is aware of a necessity of considering historical factors for proper understanding of the present state of a forest habitat.	P8S-WG/3	Lectures, classes	conversation
3	Dilemmas caused by the „forest vs. non-forest habitats“ dichotomy in the context of trees performance in contemporary rural landscapes.	P8S-WK/1	Lectures, classes	conversation

Skills (no.)	(Able to)					
1	Make use of the history and nature knowledge (in particular, the knowledge of species' regeneration niches) in the interpretation of the observed features of trees and treed habitats as well as the related processes.	P8S-UW/1 P8S-UW/2	Lectures, classes	conversation		
2	Taking part in a scientific discourse relating to theories and hypotheses on the influence of Man on trees and woods.	P8S-UK/1 P8S-UK/2 P8S-UK/3 P8S-UK/4 P8S-UK/5	classes	conversation		
Social competence (no.)	(Ready to)					
1	Critical appraisal of mainstream and popular views on the role of Man in the natural environment. Discussion with the views presented in topical scientific publications.	P8S-KK/1 P8S-KK/3	classes	conversation		
2.	Initiation of public interest activities	P8S-KO/2	Classes	conversation		
LEARNING FORMAT – NUMBER OF HOURS						
Semester (no.)	Lectures	Seminars	Lab classes	Internships	others	ECTS
III i V	5	10	—	—	—	0
METHODS OF INSTRUCTION						
Lectures provoking discussion with students, conversatoria – interactive analysis of theses, topical hypotheses, and theories presented in selected scientific publications.						
COURSE CONTENT						
<ul style="list-style-type: none"> • Theory of ecological niche; regenerational niche of selected tree species; • Adaptations of trees to ecological disturbances; the role of disturbances in the natural selection, favouring certain species and disfavouring other species. • The influence of anthropogenic and zoo-anthropogenic disturbances on life and performance of trees. • Ecological effects of the use and protection of forest areas. 						
COURSE ASSESSMENT CRITERIA						
To collect more than 50% score points (quiz, presentation, activity in discussion): >50-60 =3.0; >60-70 =3.5; >70-80 =4.0; >80-90 =4.5; >90 =5.0						
TOTAL PhD STUDENT WORKLOAD REQUIRED TO ACHIEVE THE INTENDED LEARNING OUTCOMES – NUMBER OF HOURS AND ECTS CREDITS						
Activity				Średnia liczba godzin na zrealizowanie aktywności		
Scheduled course contact hours				15		

Other contact hours involving the teacher (consultation hours, examinations)	1
Non-contact hours – student`s own work (preparation for classes or examinations, project, etc.)	10
Total number of hours	26
Total number of ECTS credits	0

INSTRUCTIONAL MATERIALS

Compulsory literature:	<p>LITERATURA PODSTAWOWA:</p> <ul style="list-style-type: none"> • Leuschner C. & Ellenberg H. (2018) Ecology of Central European Forests. Vegetation Ecology of Central Europe Volume I. Revised and Extended Version of the 6th German Edition, Translated by Laura Sutcliffe. Springer International Publishing Switzerland 2017, corrected publication 2018, https://link.springer.com/content/pdf/10.1007%2F978-3-319-43042-3.pdf (fragments)
Complementary literature:	<p>Literatura uzupełniająca:</p> <ul style="list-style-type: none"> • Witkoś-Gnach K., Tyszko-Chmielowiec P. (ed.) 2016 Trees – a Lifespan Approach. Contributions to arboriculture from European practitioners. Fundacja EkoRozwoju, Wrocław (PDF) • Read H. 2000 Veteran Trees: A guide to good management. English Nature, Peterborough (PDF) • Lonsdale D. (ed.), 2013, Ancient and other veteran trees: further guidance on management. The Tree Council, London (PDF)