

SYLABUS DO PRZEDMIOTU							
Field of studies: LANDSCAPE ARCHITECTURE							
Course title / Nazwa przedmiotu (j. polski)				Code of the course		Year / Semester	
Urban and rural ecology Ekologia miast i obszarów wiejskich				Nie uzupełniać		I	01
Type of subject:		Education Profile		The level of education		Form of studies	
obligatory		General Academic		First cycle studies		stationary	
Type of subject							ECTS
Lecture	Exercises	Laboratory	Project	Seminar	Practical classes	Exam	
15	30	-	-				6
Subject coordinator:							
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I. SUBJECT CARD	
COURSE OBJECTIVE	
C01	Knowledge about the specific structure and ecosystems of cities.
C02	Knowledge of the differences between urban and rural ecosystems.
PRELIMINARY COURSE REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES	
1	Knowledge of basic terminology in the field of the natural environment and its protection.
LEARNING OUTCOMES	
Knowledge: student knows and understands	
EU1	Student knows and understand of the ecology of cities and rural areas.
Skills: student is able to	
EU2	Student is able to assess ecological problems related to the urban environment and rural areas.
Social competences: Student is ready to	

EU3	Is ready to work in a group and make independent decisions regarding the ecology of cities and rural areas
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II. COURSE CONTENT		
Course type – Lecture		Number of hours
L1	Introductory issues.	1
L2	Levels of organization of ecological systems.	1
L3	Characteristics of ecosystems.	1
L4	Urban ecosystems (urbicenos) and rural ecosystems (agrocenos).	1
L5-L7	Methods used in ecosystem research. Analysis of results and conclusions.	3
L8-L9	The role of green areas in maintaining the biodiversity of urban areas.	2
L10	Synatropization.	1
L11	Synurbization.	1
L12	Environmental stresses.	1
L13- L14	Anthropopression – sources, impact, effects.	2
L15	Colloquium	1
TOTAL:		15
Course type - Exercises		Number of hours
E1-E2	Introduction to Exercises	2
E3-E5	Managing biodiversity of urbanized and non-urbanized ecosystems.	6
E6-E7	Natural, introduced, synanthropic plants. Parks, squares, lawns, allotment gardens.	4
E8-E9	Adaptation mechanisms of animals in urban areas.	4
E10-E11	Anthropogenic burden on urban and rural environments.	4
E12-E14	Sustainable development of rural and urban areas.	6
E15	Colloquium	2
TOTAL:		30

DIDACTIC METHODS	
1.	Lecture using audiovisual means or the PCz e-learning platform
2.	Author's teaching materials

METHODS OF ASSESSMENTS: (F – FORMATIVE; P – SUMMATIVE)	
F01	Activity in classes.
F02	Assessment of tasks developed during exercises.
P01	Final colloquium.

III. STUDENT WORKLOAD		
L.p.	Form of activity	Numer of hours for activity
		[hours]
1. direct teaching hours:		
1.1	Hours of classes organised by university – lectures	15
1.2	Hours of classes organised by university – tutorials	30
1.3	Hours of classes organised by university – laboratory	0
1.4	Hours of classes organised by university – project	0
1.5	Hours of classes organised by university – seminar	0
1.6	Exam	0
Total direct hours:		45
2. Praca własna studenta		
2.1	Preparation for tutorials	20
2.2	Preparation for laboratories	0
2.3	Preparation for projects	0
2.4	Preparation for finall lectures colloquium	5
2.5	Preparation for exam	0
2.6	Getting acquainted with the indicated literature	5
Total student's self-studies:		30
Overall student workload:		75
TOTAL NUMBER OF ECTS FOR THE COURSE:		6

The number of ECTS credits which the student obtains from classes requiring direct participation of the teacher:	3,6
Number of ECTS credits to be obtained by the student through own work:	2,4

IV. PRIMARY AND SUPPLEMENTARY LITERATURE	
Primary literature	
1	Dobrzańska B., Dobrzański G., Kielczewski D. (red.), Ochrona środowiska przyrodniczego, PWN, Warszawa, 2008.
2	Gwiazdowicz M., Środowisko przyrodnicze na obszarach wiejskich – zagrożenia i szanse. Studia BAS, 2010, 4(24)
3	Graczyk A., Zrównoważony rozwój w teorii i praktyce, Prace Naukowe AE we Wrocławiu Nr 1190, Wrocław, wyd. AE we Wrocławiu, 2007.
4	Bogumił A., Greniewski M.J., Greniewski P., Krzyżanowski L.J., Rok B., Walaszczyk K., Zrównoważony rozwój, Warszawa 2004.
5.	Gruszczyński J., Czasopismo Infrastruktura i Ekologia Terenów Wiejskich / Infrastructure and Ecology of Rural Areas, Stowarzyszenie Infrastruktura I Ekologia Terenów Wiejskich afiliowane przy Komisji Technicznej Infrastruktury Wsi, Polska Akademia Nauk, Oddział w Krakowie http://www.infraeco.pl/pl/
6.	Zimny H., Ekologia miasta. Agencja Rekl.-Wyd. A. Grzegorzczak, Warszawa, 2005.
7.	Scientific articles
Supplementary literature	
1.	Magazines related to the subject of the subject
2.	Scientific journals related to the subject of the subject

V. LEARNING OUTCOMES ATTAINMENT MATRIX							
Learning outcomes	In relation to the learning outcomes specified for the field of study	In relations to the learning outcomes to characteristic I and second level PRK		Objectives subject	Content of programme	Teaching tools	evaluation methods
		universal	In technical sciences and leading to engineering competence				
EU1	K1_W01 K1_W02	P6U_W P6S_WG	P6S_WG	C01 C02	W1- W15	1,2	P01

EU2	K1_U04	P6U_UW P6S_UO	P6S_UW	C01 C02	W1- W15 C1-C15	1,2	F01, F02 P01
EU...	K1_K03	P6S_KK P6S_KR P6U_K	P6S_KK P6S_KR	C01 C02	C1-C15	2	F01, F02

VI. FORMS OF GRADES-DETAILS	
GRADES	EFFECTS OF LEARNING
EU1	
2,0	Knows only the basic terms of the ecology of cities and rural areas. Is unable to correctly define ecological processes occurring in nature
3,0	Has general knowledge of the specific structure and functioning of urban ecosystems. He lists only some of the elements that make up the ecosystems of cities and rural areas.
4,0	Demonstrates correct knowledge of the subject matter. Is able to use source materials and understands the need to use them, while being critical of some content.
5,0	Has extensive and up-to-date knowledge of the ecology of cities and rural areas.
EU2	
2,0	Cannot identify any ecological problems related to urban and rural environments.
3,0	Is able to identify ecological problems related to the urban environment and rural areas.
4,0	Is able to analyze selected ecological problems related to the urban environment and rural areas.
5,0	Is able to properly carry out the procedure for assessing ecological problems related to the urban environment and rural areas. Has the ability to draw conclusions and put forward their own concepts.
EU3	
2,0	Is not ready to cooperate in a team.
3,0	Is ready to cooperate in a team, notices the need to work in a team and takes up this challenge.
4,0	Is ready to help his team and is ready to draw up a work plan (schedule).
5,0	Is ready to make independent decisions in a group (becomes a group leader), being sure of his decisions during discussions on a given topic and is able to represent the group's opinion.
A half mark of 3.5 is given if the student has fully passed the learning outcomes with a mark of 3.0 but has not fully assimilated the learning outcomes with a mark of 4.0 .	

A half mark of 4.5 is given in case of full credit of the LEARNING EFFECTS for a mark of 4.0 but the student has not fully assimilated the LEARNING EFFECTS for a mark of 5.0

VII. OTHER USEFUL INFORMATION ABOUT THE SUBJECT

1.	Opportunity to review supporting materials and literature: <i>Appropriate to the type of material - in teaching classes, in the TUC Central Library.</i>
2.	Information on when and where the classes will be held <i>Notice board at the Faculty of Infrastructure and Environment and on the website of the Faculty of Infrastructure and Environment, USOS system.</i>
3.	Information about the consultation (times + place): <i>the staff consultation schedule is available on the Faculty of Infrastructure and Environment website and on the staff room door.</i>