

DESCRIPTION OF THE COURSE OF STUDY

Course code	0521.2.OŚ1.B/C24c.GO	
Name of the course in	Polish	<i>Gospodarowanie odpadami</i>
	English	<i>Waste management</i>

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	Environmental Protection
1.2. Mode of study	Stationary
1.3. Level of study	First Bachelor's Degree
1.4. Profile of study*	general academic
1.5. Person/s preparing the course description	dr inż. Monika Żelezik
1.6. Contact	monika.zelezik@ujk.edu.pl

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Language of instruction	Polish, English
2.2. Prerequisites*	Selected issues from the idea of sustainable development, i.e.: sustainable production and consumption

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes	lectures - 15 h., seminar – 30 h
3.2. Place of classes	Classes in the teaching rooms of the UJK
3.3. Form of assessment	Credit with grade
3.4. Teaching methods	Lecture: verbal methods (description), multimedia presentations, Seminar: own work, tasks to be done, discussion
3.5. Bibliography	Required reading
	Further reading

Obyrn K., Szalińska E., 2005: Odpady komunalne, zbiórka, recykling, unieszkodliwianie, Wydawnictwo PK, Kraków
 Łuniewski S., 2008: Od prymitywnych do nowoczesnych składowisk odpadów, Wyd. Ekonomia i Środowisko,
 Rosik-Dulewska Cz., 2012: Podstawy gospodarki odpadami, Lublin

waste magazines: Waste Management Archive, Municipal inspection, Air protection and waste problems, Recykling

Żygadło M. (red), 2001: Strategia gospodarki odpadami komunalnymi, Wydawca PZLiTS, Poznań
 Rogoff M.J., Screve A. ,2011: Waste – to- Energy , Technologies and project implementation; Elsevier Science and Technology , Boston
 K.Wąsowicz, S. Famielec, M. Chełkowski 2018: gospodarka Odpadami komunalnymi we współczesnych miastach. Kraków 2018

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES

4.1. 4.1. Objectives of the subject (taking into account the form of classes)

Lectures

C1. Familiarizing students with the basics of law applicable in waste management.

C2. Paying special attention to ways of reducing the generation of waste, including minimizing its amount, which should be the basis for rational waste management in each municipality

W01				+	+						+			+						
W02				+	+						+			+						
W03				+	+						+			+						
U01				+	+						+			+						
U02				+	+						+			+						
U03				+	+						+			+						
K01											+			+						

4.5. Criteria of assessment of the intended learning outcomes

Form of classes	Grade	Criterion of assessment
Lectures (L)	3	Obtaining from 51% to 60% of the total number of points possible to obtain from passing
	3,5	Obtaining from 61% to 70% of the total number of points possible to obtain from passing
	4	Obtaining from 71% to 80% of the total number of points possible to obtain from passing
	4,5	Obtaining from 81% to 90% of the total number of points possible to obtain from passing
	5	Obtaining from 91% to 100% of the total number of points possible to obtain from passing
seminar (s)*	3	The student correctly defines only basic concepts in the field of waste management. He is poorly familiar with the characteristics, properties and methods of waste treatment. In a minimal way, it is able to assess the impact of g.o facilities: landfill or incineration plant on the environment.
	3,5	The student correctly characterizes and distinguishes selected groups and types of waste. Knows the principles of waste management and can discuss them. Knows the conditions and specifics of waste treatment methods.
	4	The student interprets the principles of waste management well. Correctly compares and evaluates waste recovery and disposal methods. It presents the waste management system at national level well.
	4,5	The student is able to propose and compare the possibilities of waste management depending on the source of their formation. Using knowledge in the field of waste collection and treatment, he will propose a waste management system at the level of his municipality.
	5	The student is able to use all the techniques learned to create an optimal integrated waste management system. Independently identifies solutions for waste management at the municipal level

5. BALANCE OF ECTS CREDITS – STUDENT'S WORK INPUT

Category	Students workload
	Full -time studies
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	45
<i>Participation in lectures*</i>	15
<i>Participation in classes, seminars, laboratories*</i>	30
<i>Preparation in the exam/ final test*</i>	
<i>others</i>	
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/	30
<i>Participation in lectures*</i>	5
<i>Participation in classes, seminars, laboratories*</i>	8
<i>Preparation in the exam/ final test*</i>	8
<i>Collection of materials for the project, internet query*</i>	5
<i>Development of a multimedia presentation*</i>	4
<i>Other (please indicate which ones? e.g. e-learning)*</i>	
TOTAL NUMBER OF HOURS	75
ECTS credits for the course of study	3

**delete as appropriate*

Accepted for execution *(date and legible signatures of the teachers running the course in the given academic year)*

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