

## Information sheet for the course: Waste Engineering

<b>University:</b> Alexander Dubček University of Trenčín	
<b>Faculty:</b> Faculty of Industrial Technologies in Púchov	
<b>Course unit code:</b> MI-PV-A-17	<b>Course unit title:</b> Waste Engineering
<b>Form, scope and method of educational activity:</b>	
<b>Form of study:</b> Lecture / Seminar / Laboratory tutorial	
<b>Recommended number of lessons (hours):</b>	
<b>Weekly:</b> 2 / 2 / 0 <b>During the semester:</b> 24 / 24 / 0 <b>Method of study:</b> attendance method	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 4.	
<b>Degree of study:</b> The 1st degree of study	
<b>Course prerequisites:</b>	
<b>Assessment methods:</b>	
Assessment during the semester:	
Summary assessment of work results during the semester = 40 points	
Active participation during practice, semester work – presented in the form of presentation during semester on seminars.	
Final assessment:	
Assessment of exam results = 60 points	
Student can sign in to final exam after 20 points achievement at least in the assessment during the semester	
Grading scale:	
Grade A: 91 – 100 points	
Grade B: 81 – 90 points	
Grade C: 71 – 80 points	
Grade D: 61 – 70 points	
Grade E: 55 – 60 points	
Grade FX: less than 55 points	
<b>Learning outcomes of the course unit:</b>	
Student knows the basic legislation, knows how to define basic terms, knows the issue of waste management, sorting of generated municipal waste, recovery, disposal, student know the issue related to waste-free and low-waste technologies, and knows the recycling of selected types of waste.	
<b>Course contents:</b>	
Basic legislation, Basic terms.	
Purpose of waste management.	
Waste management program.	
Waste recovery.	
Waste disposal (incineration, landfilling).	
Catalogue of waste.	
Waste analysis methods.	
Waste landfills (methods of landfilling, managed waste landfills, landfill closure and reclamation).	
Solidification of dangerous waste.	
Management of radioactive waste.	
Waste recycling.	
Waste-free technologies.	
Waste sorting.	
Collection yards.	
Municipal waste components.	
Recycling of selected types of waste.	
<b>Recommended of required reading:</b>	
JANÍK, R., PAJTÁŠOVÁ, M., ONDRUŠOVÁ, D. a kol.: Odpad ako zdroj materiálov a	

energie. 1. vyd. TnUAD, FPT Trenčín 2021. 256 s. ISBN 978-80-8075-960-5  
BETÁKOVÁ, J. a kol.: Hovoríme o odpadoch 2. 1. vyd. Trenčín. 2005. 80s. ISBN 80–8075–066-1.  
GAŠPARÍKOVÁ, B. a kol.: Odpadové hospodárstvo Slovenskej republiky po vstupe do EÚ, IN: EPOS Bratislava 2004, ISBN 80-8057-610-6.  
MRAČKO, M.: Príručka odpadového hospodárstva. Bratislava: Epos, 2009. 80 s. ISBN 978-80-8057-822-0.  
SOLDÁN, M., SOLDÁNOVÁ, Z., MICHALÍKOVÁ, A.: Ekologické nakladanie s materiálmi a odpadmi, STU Bratislava, 2005 Bratislava, ISBN: 80 – 227 – 2223 – 5.  
Zákon o odpadoch 79/2015 Z. z.  
<https://www.enviroportal.sk/odpady>  
E-learning TnUAD.

**Language:**

English

**Remarks:**

Compulsory elective course / Profile course

**Evaluation history: 70**

Total number of graded students:

A	B	C	D	E	FX
70.0	8.57	18.57	2.86	0.0	0.0

**Lecturers:** prof. RNDr. Mariana Pajtášová, PhD., Ing. Andrea Feriancová, PhD.

**Last modification:** 31.08.2022

**Supervisor:** doc. Ing. Jan Krmela, PhD.