

Information sheet for the course: Toxicology and High-risk Characteristics of Materials

University: Alexander Dubček University of Trenčín	
Faculty: Faculty of Industrial Technologies in Púchov	
Course unit code: MI-I-PV-21E	Course unit title: Toxicology and High-risk Characteristics of Materials
Form, scope and method of educational activity: Form of study: Lecture / Seminar / Laboratory tutorial Recommended number of lessons (hours): Weekly: 2 / 1 / 0 During the semester: 24 / 12 / 0 Method of study: attendance method	
Number of credits: 4	
Recommended semester: 3.	
Degree of study: The 2nd degree of study	
Course prerequisites:	
Assessment methods: Assessment during the semester: Summary assessment of work results during the semester = 40 points The condition to graduate course unit is to elaborate semestral work and written exam. Student can sign in exam after 20 points achievement at least in assessment during the semester. Final assessment: Assessment of exam results = 60 points Exam is realized in the form of written test. 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	
Learning outcomes of the course unit: Student knows how to use the knowledge of toxicology in the processes of environmental contamination by toxic xenobiotics, its risk factors and properties of selected materials categories. Student knows toxicological characteristics of selected chemical substances and harmful substances categories. Student knows the legislation on labelling, classification and handling of chemical and harmful substances.	
Course contents: Basic terms and definitions, dividing of toxicology. The meaning of toxicology and ecotoxicology for industry. Specific effects of selected groups of toxic substances. Assessment of the chemical safety of the substance. Condition law for putting the chemical substances and chemical mixtures on the market. PBT and vPvB assessment, Exposure scenarios. Risk management, assessment and classification Risks of construction products. Chemical substances in products, carcinogens, mutagens, reproductive toxic substances and endocrine disruptors. Harmful substances: polychlorinated hydrocarbons, dioxins, heavy metals. Acidic and greenhouse gases.	
Recommended of required reading: TOMAŠKOVÁ, M.: Nebezpečné látky a ochrana pred požiarimi. Košice, 2014. ISBN 978-80-553-1934-6. CHMIELEWSKÁ, E., BEDRNA, Z.: Rizikové látky a environmentálne hazardy, Cicero, s.r.o.	

Bratislava, 2007. ISBN 978-80-969678-0-3.

KURUCZ J.: Toxické vlastnosti prvkov a ich zlúčenín. Vydavateľstvo UMB Banská Bystrica: 2015. ISBN 978-80-557-0856-0.

FARGAŠOVÁ A.: Environmentálna toxikológia a všeobecná ekotoxikológia. Vydavateľstvo Orman, 2008. ISBN 9788096967568.

E-learning TnUAD.

Language:

English

Remarks:

Compulsory elective course

Evaluation history: 26

Total number of graded students:

A	B	C	D	E	FX
46.15	15.38	30.77	0.0	3.85	3.85

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

Last modification: 31.08.2022

Supervisor: prof. RNDr. Mariana Pajtášová, PhD.