

**Information sheet for the course  
Toxicology and High-risk Characteristic of Materials**

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>	
<b>Faculty:</b> <i>Faculty of Industrial Technologies in Púchov</i>	
<b>Course unit code:</b> <i>MI-I-PV-21E</i>	<b>Course unit title:</b> <i>Toxicology and High-risk Characteristic of Materials</i>
<b>Type of course unit:</b> <i>optional</i>	
<b>Planned types, learning activities and teaching methods:</b>  <i>Lecture: 2 hours weekly/26 hours per semester of study; face to face</i> <i>Seminar: 1 hours weekly/13 hours per semester of study; face to face</i> <i>Laboratory tutorial: 0 hours</i>	
<b>Number of credits:</b> <i>4</i>	
<b>Recommended semester:</b> <i>3<sup>rd</sup> semester in the 2<sup>nd</sup> year full-time</i> <i>3<sup>rd</sup> semester in the 2<sup>nd</sup> year part-time</i>	
<b>Degree of study:</b> <i>the 2<sup>nd</sup> degree of study (Engineer's degree)</i>	
<b>Course prerequisites:</b> <i>none</i>	
<b>Assessment methods:</b> <i>During the semester, the student must work out the assigned semestral exercise and present it. At the end of the semester will be a test. Active participation in the seminars.</i>	
<b>Learning outcomes of the course unit:</b> <i>The student can recognize the importance and perspective of exploitation knowledge of toxicology in the process of environmental contamination by toxic xenobiotics, their risk factors and characteristics of selected groups of materials.</i>	
<b>Course contents:</b> <i>Historical development of toxicology, toxicology classification, basic concepts and definitions, division of toxicology, The importance of toxicology and ecotoxicology for agriculture, rubber industry, biotic monitoring, classification of poisons and pollutants, Division of poisonings, symptoms of poisonings, first aid, Specific effects of toxic substances, The inputs of toxic substances into the organism, the rate and intensity of infiltration poison into the organism, resistance of the organism against poisons, Characteristics risk of chemicals to humans and animals, relationship of dose and effect, influence of various factors, exposure assessment,. Toxicity testing, Acute, subacute, chronic toxic effect, mutagens, carcinogens, teratogenic, Division of carcinogens, Harm to the fetus by phases of development, The toxicological effects of selected elements and compounds, Inorganic substances and their toxic effects, Organic substances and their toxic effects, Sources of radioactive contamination, Pesticides, Narcotic and psychotropic substances, Hazardous materials.</i>	
<b>Recommended of required reading:</b> <i>CHMIELEWSKÁ, E., BEDRNA, Z.: Rizikové látky a environmentálne hazardy, Cicero, s.r.o. Bratislava, 2007, ISBN 978-80-969678-0-3.</i> <i>PALEČEK, J., LINHART, I., HORÁK, J.: TOXIKOLOGIE A BEZBEČNOST PRÁCE V CHEMII, FAKULTA CHEMICKÉ TECHNOLOGIE, PRAHA, 1999, ISBN 80-7080-266-9.</i> <i>HORÁK, J., LINHART, I., KLUSOŇ, P.: ÚVOD DO TOXIKOLOGIE A EKOLOGIE PRO CHEMIKY, VŠ CHEMICKO-TECHNOLOGICKÁ, PRAHA, 2004, ISBN 80-7080-548-X</i> <i>KUPEC, J.: TOXIKOLOGIE, UNIVERZITA TOMÁŠE BATI VE ZLÍNĚ, ZLÍN, 2004, ISBN 80-7318-216-5.</i>	
<b>Language:</b> <i>Slovak</i>	
<b>Remarks:</b>	

**Evaluation history:***The total number of evaluated students: 0*

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

**Lecturers:** *prof. RNDr. Mariana Pajtášová, PhD.***Last modification:** *31.03.2014***Supervisor:** *prof. Ing. Darina Ondrušová, PhD.*