

Information sheet for the course Nonmetallic Materials

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>	
Course unit code: <i>MT-P-25</i>	Course unit title: <i>Nonmetallic Materials</i>
Type of course unit <i>optional</i>	
Planned types, learning activities and teaching methods: <i>Lecture: 2 hours weekly/26 hours per semester of study; face to face</i> <i>Seminar: 2 hours weekly/26 hours per semester of study; face to face</i> <i>Laboratory tutorial: 0</i>	
Number of credits: <i>5</i>	
Recommended semester: <i>the 4th semester in the 2nd year of the full-time form of study</i> <i>the 4th semester in the 2nd year of the part-time form of study</i>	
Degree of study <i>the 1st degree of study (Bachelor's degree)</i>	
Course prerequisites: <i>MT-P-4 Material Science I.</i>	
Assessment methods: <i>examination</i>	
Learning outcomes of the course unit: <i>Students gain basic knowledge on nonmetallic materials, on their production, mechanical and utility properties. Emphasis is laid on prevalingly used nonmetallic materials used in the design of machines and equipment in individual fields of industry. Students gain cross-disciplinary knowledge from the field of production, testing and failure of nonmetallic materials and are acquainted with their industrial application. Students are orientated in the mechanical, technological and chemical properties of nonmetallic materials related with their use for particular purposes and practical application.</i>	
Course contents: <i>Types of nonmetallic materials</i> <i>Thermoplastics</i> <i>Reactoplastics</i> <i>Elastomers</i> <i>Ceramics</i> <i>Glasses</i> <i>Composites</i> <i>Fibres and textile</i> <i>Intermetallic compounds</i> <i>Application of anorganic nonmetallic materials in practice</i> <i>Application of organic materials in practice</i>	
Recommended references and resources: <i>Skočovský, P. a kol. : Konštrukčné materiály, ŽU Žilina, 2000</i> <i>Pulc, V., Hrnčiar, V., Gondár, E.: Náuka o materiáli, STU Bratislava, 2004</i> <i>Ptáček, L. a kol.: Nauka o materiálu I, II . Akademické nakladatelství CERM, Brno, 2002.</i> <i>Ehrenstein, G. W. : Polymerní kompozitní materiály, Scientia, Praha, 2009, ISBN-978-80-86960-29-6.</i>	
Language: <i>Slovak</i>	

Remarks: <i>none</i>					
Evaluation history: <i>Number of classified students: 0</i>					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Lecturers: <i>prof. Ing. Františka Pešlová, PhD., doc. RNDr. Ján Bežecný, CSc., prof. Ing. Darina Ondrušová, PhD.</i>					
Last modification: <i>31.03.2014</i>					
Supervisor: <i>doc. Ing. Marta Kianicová, PhD.</i>					