

Information sheet for the course Composite Materials

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>					
Course unit code: <i>MI-P-37</i>			Course unit title: <i>Composite materials</i>		
Type of course unit: <i>compulsory</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: 1 hour weekly/13 hours per semester of study; face to face</i> <i>Laboratory tutorial: 0</i>					
Number of credits: <i>4</i>					
Recommended semester: <i>6th semester in the 3rd year full-time</i> <i>6th semester in the 3rd year part-time</i>					
Degree of study: <i>the 1st degree of study (Bachelor's degree)</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>Active participation in the seminars, creation and presentation of semester tasks.</i>					
Learning outcomes of the course unit: <i>Students will be familiar with the characteristics of textile composites and their application in practice. Students are able to plan experiments of composites and evaluate the results of experiments.</i>					
Course contents: <i>Composites-characterization. The types of the composites. Properties of composites. Types and properties of reinforcing fibers and matrices. Material parameters describing the selected fabric reinforcement and matrix. Selected applications especially fiber reinforced polymer composites and textile composites. Planning experiments of composites. Proposal forms of test samples and analysis of results obtained from experiments.</i>					
Recommended of required reading: <ol style="list-style-type: none"><i>1. Ever J. Barbero. Introduction to Composite Materials Design. Taylor & Francis, Inc., 1998. ISBN 1560327014.</i><i>2. Daniel O. Adams: A comparison of CEN and ASTM test methods for composite materials. USA, Virginia, NTIS, University of Utah: 2004. DOT/FAA/AR-04/24 Ehrenstein.</i><i>3. Gottfried W. Polymerní kompozitní materiály, Scientia, 2009, 351s.</i>					
Language: <i>Slovak</i>					
Remarks: <i>-</i>					
Evaluation history: <i>0</i>					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
Lecturers: <i>Ing. Vladimíra Krmelová, PhD.</i>					
Last modification: <i>31.03.2014</i>					
Supervisor: <i>prof. Ing. Darina Ondrušová, PhD.</i>					