

Information sheet for the course Technical Textiles

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>					
Course unit code: <i>MI-I-PV-7D</i>			Course unit title: <i>Technical Textiles</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: 5					
Recommended semester: <i>2nd semester in the 1st year full-time</i> <i>2nd semester in the 1st year part-time</i>					
Degree of study: <i>the 2nd degree of study (Engineer's degree)</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>Creation and presentation of semester task</i>					
Learning outcomes of the course unit: <i>Students know procedures for the preparation, structure and properties of technical reinforcement fibers and reinforcing materials and their applications in the form of technical textiles in various industries.</i>					
Course contents: <i>Distribution of technical textiles. Fibers for technical textiles. The basic characteristic and distribution of fibers. Fibrous polymers. Technical yarn - structure, properties and applications. Methods of the production of technical textiles. Woven fabrics. Knitted fabrics. Nonwovens. Modify of technical textiles. Methods for evaluation of technical textiles. Main applications of technical textiles. Reinforcement in the rubber industry. Adhesion treatment of textile reinforcing materials. The methods and the importance of evaluation of adhesion. The adhesion of the rubber/textile cord. Intelligent textiles.</i>					
Recommended of required reading: <i>Jambrich M., Piklesr A., Diačik J.: Fyzika vlákien. ALFA Bratislava, 1997.</i> <i>Militký J.: Textilní vlákna-klasická a speciální, TU Liberec, 2002.</i> <i>Prekop Š. a kol.: Gumárska technológia II. GC tech Trenčín, 2003.</i> <i>Lizák P., Militký J.: Technické textilie. FPT Púchov, 2000.</i> <i>Adanur S. Wellington Sears Handbook of Industrial Textiles. Basel: Lancaster, 1995.</i>					
Language: <i>Slovak</i>					
Remarks: -					
Evaluation history: 3					
A	B	C	D	E	FX
66.67	0.0	33.33	0.0	0.0	0.0
Lecturers: <i>doc. Ing. Pavol Lizák, PhD., doc. Ing. Petra Skalková, PhD., Ing. Vladimíra Krmelová, PhD.</i>					
Last modification: <i>prof. Ing. Darina Ondrušová, PhD.</i>					
Supervisor: <i>31.03.2014</i>					