

Information sheet for the course Rubber Technology

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>					
Course unit code: <i>PP-PV-10</i>			Course unit title: <i>Rubber Technology</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: 0</i> <i>Laboratory tutorial: 0</i>					
Number of credits: <i>2</i>					
Recommended semester: <i>4th semester in the 2nd year full-time</i> <i>4th semester in the 2nd 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>Student writes two screening control tests during semester and obtains minimally 60 % from both tests.</i>					
Learning outcomes of the course unit: <i>Student has the knowledge about technology processes in rubber industry and student orients in this problem.</i>					
Course contents: <ol style="list-style-type: none"> 1. Rubbers - characterization, properties, division. 2. The preparation of rubber blends. 3. Extrusion of rubber blends. 4. Calendering of rubber blends. 5. Jacketing of conductors and cables – technology, material composition of blends for jacketing. 6. Waterproofing of reinforcing materials. 7. Flooring materials – production technology, material composition of flooring materials. 8. Tires – distribution, structure, basic types, material composition. 9. Production technology of tires. 10. Transport bands – distribution, structure, basic types, material composition, production. 11. Drive belts, hoses, tire-tube and vulcanisation membranes – types and structure, material composition, production technology. 12. Technical rubber – distribution, examples of utilization, production methods. 13. Field trip in rubber factory. 					
Recommended of required reading: <i>OLŠOVSKÝ, M.: Kaucuky. Výroba-vlastnosti-použitie. Trenčín : TnUAD, 2012.</i> <i>OLŠOVSKÝ, M. a kol.: Gumárenské výrobky a výroby. Trenčín : TnUAD, 2004.</i> <i>PREKOP, Š. a kol.: Gumárska technológia II. Trenčín : GC-tech a TnUAD, 2003.</i> <i>DUCHÁČEK, V. - HRDLIČKA, Z.: Gumárenské suroviny a jejich zpravovávání. Praha : VŠCHT, 2009.</i>					
Language: <i>Slovak</i>					
Remarks:					
Evaluation history: Number of students: 7					
A	B	C	D	E	FX

Lecturers: <i>doc. Ing. Petra Skalková, PhD.</i>
Last modification: <i>31.03.2014</i>
Supervisor: <i>doc. Ing. Ján Vavro, PhD.</i>