

Information sheet for the course Materials Processing Technology I

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>					
Course unit code: <i>PP-P-19</i>			Course unit title: <i>Materials Processing Technology I</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>Laboratory tutorial: 1 hour weekly/13hours per semester of study; face to face</i>					
Number of credits: <i>4</i>					
Recommended semester: <i>3rd semester in the 2nd year full-time</i> <i>5th semester in the 3rd year part-time</i>					
Degree of study: <i>the 1st degree of study (Bachelor's degree)</i>					
Course prerequisites: <i>PP-P-4 Material science I</i>					
Assessment methods: <i>1 project of materials processing technology will be evaluated during the course.</i>					
Learning outcomes of the course unit: <i>Student has a set of theoretical and practical knowledges on processing technology in industry.</i> <i>Student can determine and solve problems of casting and welding.</i>					
Course contents: <ol style="list-style-type: none"> 1. <i>Casting advantages and application</i> 2. <i>Principle of solidification</i> 3. <i>Molding and casting processes</i> 4. <i>Sand and centrifugal casting</i> 5. <i>Precise casting</i> 6. <i>Failure of casting.</i> 7. <i>Fundamentals of welding</i> 8. <i>Fusion welding processes</i> 9. <i>Weldability testing</i> 10. <i>Soldering of metals</i> 					
Recommended of required reading: <ol style="list-style-type: none"> 1. <i>http://sk.esab.net/sk/sk/education/processes-mma-smaw.cfm</i> 2. <i>ASM Metals Handbook: Welding, Brazing and Soldering, 1993, Vol. 6. ISBN 0-87170-377-7(V.1)</i> 					
Language: <i>Slovak</i>					
Remarks:					
Evaluation history:					
A	B	C	D	E	FX
Lecturers: <i>doc. Ing. Marta Kianicová, PhD., doc. Ing. Ondrej Nemčok, PhD., Ing. Rudolf Valášek</i>					
Last modification: <i>31.03.2015</i>					
Supervisor: <i>doc. Ing. Ján Vavro, PhD.</i>					