

Information sheet for the course
Selected Chapters from Corrosion of Materials and Corrosion Protection

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>					
Course unit code: <i>MI-I-PV-31</i>			Course unit title: <i>Selected Chapters from Corrosion of Materials and Corrosion Protection</i>		
Type of course unit: <i>optional</i>					
Planned types, learning activities and teaching methods: <i>Course of State examine/face to face</i>					
Number of credits: <i>2</i>					
Recommended semester: <i>4th semester in the 2nd year full-time</i> <i>6th semester in the 3rd year part-time</i>					
Degree of study: <i>the 2nd degree of study (Engineer's degree)</i>					
Course prerequisites: <i>Graduation of all courses</i>					
Assessment methods: <i>oral examination</i>					
Learning outcomes of the course unit: <i>Student successfully complete subject of state examination</i>					
Course contents: <ol style="list-style-type: none"> 1. Mechanism of corrosion. 2. Electrochemical mechanism of corrosion. 3. Passivity – process of passivity, examples 4. E-pH graphs (Fe). 5. Basis of corrosion protection. 6. Safety function of metal coatings – anode and cathode coatings 7. Coating Cu-Ni-Cr. 8. Technological practices in galvanic metallization 9. Constituent parts and facilities of electrolytic bath. 10. Coatings Cu, Ni, Zn, Cr – type of electrolytic bath 11. Converse coatings 12. Waste from galvanic processes. 13. Specific processes of surface modification – composite coatings 14. Facilities and manners formation of enamel 15. Methods of corrosion examination, monitoring of corrosion 					
Recommended of required reading: <i>Kohout J., Melník M.: Anorganická chémia 1, Základy anorganickej chémie, STU Bratislava, 1997, ISBN 80-227-0872-0</i> <i>Chovancová M., Fellner P., Špirk E.: Základy korózie a povrchovej úpravy kovových materiálov, STU Bratislava</i> <i>Atkins P.W.: Fyzikálna chémia, preklad edit.</i> <i>Biskupič S., STU 1999, ISBN 80-227-1238-8ASM Handbook, Vol. 13A: Corrosion: Fundamentals, Testing, and Protection ASM International 2003</i>					
Language: <i>Slovak</i>					
Remarks:					
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. Katarína Moricová, PhD.</i>					

Last modification: <i>31.03.2014</i>
Supervisor: <i>prof. Ing. Darina Ondrušová, PhD.</i>