

Information sheet for the course
Selected Chapters from Degradation Processes and Prediction of Life

University: <i>Alexander Dubček University of Trenčín</i>	
Faculty: <i>Faculty of Industrial Technologies in Púchov</i>	
Course unit code: <i>MI-I-PV-27</i>	Course unit title: <i>Selected Chapters from Degradation Processes and Prediction of Life</i>
Type of course unit: <i>optional</i>	
Planned types, learning activities and teaching methods: <i>Subject of state examination / 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>completing all compulsory and compulsory optional courses in the curriculum, including course unit code MI-I-PV12A "Degradation Processes and Prediction of Life"</i>	
Assessment methods: <i>Successful completing of the subject of the state examination</i>	
Learning outcomes of the course unit: <i>The student successfully completes the subject of the state examination</i>	
Course contents: <i>Definition of a technical object (TO)</i> <i>Systemic approach to dealing with difficult issues</i> <i>Potential origination and prediction of limit states of TO</i> <i>Characteristics and definition of degradation processes of TO</i> <i>Procedure applied in analyzing degradation and failure of TO</i> <i>Character of failure and procedure of assessment of the cause of failure of TO</i> <i>Forensic engineering in material science</i> <i>Expert engineering</i> <i>Fracture mechanics and process of fracture in selected materials</i> <i>Calculation of residual life of TO</i>	
Recommended references and resources: <ol style="list-style-type: none"> 1. POKLUDA, J., KROUPA, F., OBDRŽÁLEK, L. <i>Mechnické vlastnosti a struktura pevných látek</i>. Brno 1994. p. 386. ISBN 80-214-0575-9. 2. ASM Metals Handbook: Failure analysis and Prevention, Vol. 11, pp. 1039-1071. 3. JANÍČEK, P.: <i>Systémové pojetí vybraných oborů pro techniky</i>. Učební texty. CERM, VUT, p.1234, Brno 2007 	
Language: <i>Slovak</i>	
Remarks: <i>Remarks pertaining to the subject can be mentioned: e.g. that the subject can be</i>	

presented only in the winter semester, or if at least 15 students are enrolled, or if the capacity of the subject is limited to 40 students then from a higher number students can be selected to fit the capacity

Evaluation history: *Number of classified students : 0*

A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturers: *prof. Ing. Františka Pešlová, PhD.*

Last modification: *31.03.2014*

Supervisor: *Prof. Ing. Darina Ondrušová, PhD.*