Information sheet for the course Mechanical Tests of Materials

University: Alexander Dubček University of Trenčín

Faculty: Faculty of Industrial Technologies in Púchov

Course unit code:MI-P-34Course unit title:Mechanical Tests of Materials

Type of course unit: *compulsory*

Planned types, learning activities and teaching methods:

Lecture: 2 hours weekly/26 hours per semester of study; face to face Laboratory tutorial: 2 hours weekly/26 hours per semester of study; face to face

Number of credits: 4

Recommended semester: 6^{th} semester in the 3^{rd} year full-time

8th semester in the 4th year part-time

Degree of study: *the I*st *degree of study (Bachelor's degree)*

Course prerequisites: none

Assessment methods:

- 1. Pass 3 reports from measuring of mechanical properties of materials.
- 2. Complete two tests with assessment:

15-16	A	points
14-14,5	В	points
11,5-13,5	C	points
10,5-11	D	points
8-10	E	points

Learning outcomes of the course unit:

Students know to work with knowledge in the field of mechanical testing of different materials with respect of operation conditions.

Course contents:

- 1. Introduction of mechanical behaviour of materials
- 2. Mechanical behaviour under tensile testing
- 3. Hardness testing
- 4. Microindentation hardness testing
- 5. Friction, wear and surface testing
- 6. Creep testing
- 7. Impact toughness testing
- 8. Mechanical testing of components

Recommended of required reading:

- **1.** SKOČOVSKÝ, P. BOKŮVKA, O. PALČEK, P. : Náuka o materiáli. Žilina, EDIS, 2000. 199 s. ISBN 80-7100-303-4
- 2. ASM HADNBOOK: Testing and Evaluation. ASM International. 2000. Vol. 8. pp. 2235 ISBN 0-87170-389-0

Language: Slovak							
Remarks:							
Evaluation history:							
А	В	С	D	Е	FX		
Lecturers: doc. Ing. Marta Kianicová, PhD., Ing. Dana Bakošová, PhD.							
Last modification: 31.03.2014							
Supervisor: doc. Ing. Marta Kianicová, PhD.							