# 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: PP-P-31 Course 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

Seminar:0

Laboratory tutorial: 2hours weekly/26 hours per semester of study

Number of credits: 4

**Recommended semester**: 5<sup>th</sup> semester in the 3<sup>rd</sup> year full-time

7<sup>th</sup> semester in the 4<sup>th</sup> year part-time

**Degree of study:** *the 1<sup>st</sup> degree of study (Bachelor's degree)* 

Course prerequisites: PP-P-4 Material Science I, PP-P-28 Material Science II

#### **Assessment methods:**

- 1. Submission of three papers on the measurement of mechanical properties of materials
- 2. Passing the test number 1 and number 2 test with 10 questions and evaluation

 15-16
 points
 A

 14-14,5
 points
 B

 11,5-13,5
 points
 C

 10,5-11
 points
 D

 8-10
 points
 E

#### **Learning outcomes of the course unit:**

The student has knowledge in the field of testing and evaluation of the tests of mechanical properties of various construction materials with regard to operating conditions.

#### **Course contents:**

The course unit provides the students with the body of knowledge defining the essence of properties of various types of construction materials and their behaviour in different loading conditions. It deals with the experimental methods of their evaluation.

University students are acquainted with methodology of performing of destructive and nondestructive tests for evaluation of the mechanical and technological properties of the construction materials.

### **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

3.

- 4. ISBN 0-87170-389-0
- **5.** VAJDOVÁ, J. ŠTUBŇA, M. OLŠOVSKÝ, M. : Laboratórium odboru ll. Chemické a fyzikálno mechanické skúšky. TnUAD FPT Púchov. 2003.

160 s. ISBN 80-8075-010-6					
Platné normy STN EN					
Language: Slovak					
Remarks:					
Evaluation history:					
Total number of evaluated students: 59					
A	В	С	D	Е	FX
6.78	18.64	38.98	16.95	18.64	0.0
Lecturers: doc. Ing. Ondrej Nemčok, PhD., Ing. Rudolf Valášek					
Last modification: 31.03.2015					
Supervisor: doc. Ing. Ján Vavro, PhD.					