Information sheet for the course
Theory of forming

University: *Alexander Dubček University of Trenčín*

Faculty: *Faculty of special technology*

Course unit code: *ŠST/I/3-28/d* | **Course unit title:** *Theory of forming*

Type of course unit: *compulsory*

Planned types, learning activities and teaching methods:
Lectures - 2 hours weekly, laboratory seminars - 1 hour weekly face to face

Number of credits: *3*

Recommended semester: *1st semester in the 1st year (full-time)*
1st semester in the 1st year (part-time)

Degree of study: *II. (engineer)*

Course prerequisites: *Material Science I., Material Science II.*

Assessment methods:
100% attendance on seminars, 60 % attendance on lectures, successful submission of the seminar paper, proof of acquired knowledge from the subject with using oral and written examination

Learning outcomes of the course unit:
The student has knowledge of cross-field focused on the basic knowledge of the theory of forming, focusing mainly on the properties of metallic materials theory of plastic deformation and design tools for volume shaping cold and heat. Special forming methods used in the automotive industry and the production of special equipment.

Course contents:
The processes of forming technology is the subject complement-based mathematical - physical theories. This applies to wrought materials (formability) further in the design and manufacture of forming tools and dies. In theory related to the forming and heat treatment, which may enter the forming process. In view of the fact that all technological disciplines are also important for the production but not equally represented. Forming one of the disciplines that are currently less developed because they are suitable for mass production costly to implement it. That is why the course, forming a deepening students' knowledge so as to contribute to the expansion of the use of forming processes in manufacturing.

Recommended of required reading:
DILLINGER, J. a kol.: Moderní strojírenství pro školu i praxi, EUROPA - SOBOTÁLES cz.,Praha 2007, 608 s.
PERNIS, R.: Teória tvárnenia kovov, Trenčianska univerzita AD v Trenčíne, 2007
LIPA, Z. a kol.: Priemyselné technológie a výrobné zariadenia, MTF Trnava, ES STU Bratislava, 2003
ČECH, J. a kol.: Strojírenská metrologie, Akademické nakladatelství CERM, s.r.o. Brno, 2005
BLAŠČÍK, F. a kol.: Technológia tvárnenia, zlievárenstva a zvárania, ALFA , 1988
PERNIS, R.: Teória a technológia výroby kalíškov, Trenčianska univerzita AD v Trenčíne, 2009

Language: *Slovak, English*

Remarks:

Evaluation history:
Total number of student being evaluated:

A	B	C	D	E	FX
0, 0	0,0	0,	0,0	0,0	0,0

Lecturers: *Assoc.prof. Ing. Ondrej Hírešr, CSc.*
Ing. Daniela Antalová, PhD.

Last modification: *15.4.2014*

Supervisor: *prof. Ing. Jiří Balla, CSc., guarantee of the study program "Special Mechanical Engineering Technology"*