Information sheet for the course
Modern technological methods of machine production and assembly

University: *Alexander Dubček University of Trenčín*

Faculty: *Faculty of special technology*

Course unit code: *MŠT/B/3-24/d*

Course unit title: *Modern technological methods of machine production and assembly*

Type of course unit: *compulsory*

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

Number of credits: *4*

Recommended semester: *5th semester in the 3rd year (full-time)*
5th semester in the 3rd year (part-time)

Degree of study: *I. (bachelor)*

Course prerequisites: *MŠT/B/3-21/d Production and repair technologies*

Assessment methods:
Final assessment - test: Semester Project and answer four questions of cross-sectional compounds of the curriculum.

Learning outcomes of the course unit:
The student has knowledge of cross-cutting proposal of technological processes of production, can use technological discipline that is effective for the production of components in terms of its quality, time and cost of production. Give an overview of modern methods of engineering technology with economic and technological importance for small and medium series production, or in individual production but also in large batches with respect to the Assembly products.

Course contents:
Subject in the introduction highlights the importance of technical preparation of production and addresses the relation between the disciplines of engineering technology continues Foundry: preparation of liquid metal, modern methods of production molds and cores, automated casting, shakeout, cleaning and finishing of castings, castings control. Modern methods of welding arc and resistance welding. Modern methods of separation and carving materials. Modern methods of thermoforming (forging), cold forming (pressing, drawing, extruding, forging special methods. Modern methods of cultivation, the application of CNC turning, CNC milling, CNC machining centers. Non-conventional machining methods.

Recommended of required reading:
DILLINGER, J. a kol.: Moderní strojírenství pro školu i praxi, EUROPA - SOBOTÁLES cz., Praha 2007, 608 s.
Majerík, J., Šandora,J.: Nové progresívne nástroje a metódy technológie obrábania - 1.vyd. - Trenčín: TnUAD, 2011. - 220 s. - ISBN 978-80-8075-515-7.

Language: *Slovak*

Remarks:

Evaluation history *Total number of students being evaluated:*

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

Lecturers: *doc. Ing. Harold Mäsiar, CSc., Ing. Jozef Majerík, PhD.*

Last modification: *15.4.2014*

Supervisor: *Assoc. prof. Ing. Peter Lipták, CSc., guarantee of the study program "Mechanisms in Special Technology".*