Information sheet for the course
Theory of assembly and disassembly

University: *Alexander Dubček University of Trenčín*

Faculty: *Faculty of special technology*

Course unit code: *ŠST/I/3-30/d* | **Course unit title:** *Theory of assembly and disassembly*

Type of course unit: *compulsory*

Planned types, learning activities and teaching methods:
Type of course: Lecture / Seminar / Laboratory. Recommended extent of course (in hours): 2/0/1

Number of credits: *4*

Recommended semester: *3rd semester in the 2nd year (full-time)*
3rd semester in the 2nd year (part-time)

Degree of study: *II. (engineer)*

Course prerequisites: *ŠST/I/4-56/d Computer Aided Design II*

Assessment methods:
100% participation in laboratory exercises demonstrate basic knowledge of the subject during the semester, the timely production and delivery semester project. min. 50% attendance at lectures, demonstrate knowledge of subject content in written and practical examination.

Learning outcomes of the course unit:
The student will become familiar with the principles and terminology systems assembly, disassembly, respectively. assembly technology. It is able to suggest mounting system for mounting a specific part number, group of components, assemblies and machine parts or machinery, disassembly of parts, assemblies and machine parts or machinery.

Course contents:
Assembly and disassembly as a subsystem of the production system. Precast product as an object assembly and disassembly. Assembly joints and assembly technology. Heat Engineering. Means operational handling. Robots and robotic lines for assembly and disassembly. Assembly Conveyors and induction trolleys. Mounting units. Mechanisms and assembly technology nodes. Working methods of mounting and dismounting, group work. The organization and management of the assembly process. People in the assembly process. Humanization assembly work. Working methods of mounting and dismounting. Group work (individual, line, nested, group). Economy assembly process. Predicting the development of assembly and disassembly. Computer Aided CAE systems in the process of assembly and disassembly of machinery. Design and computer support assembly and disassembly processes.

Recommended of required reading:
VALENTOVIČ, E.: Základy montáží, SVŠT Bratislava, 2002, ISBN 80-227-1464-X.
SLANINA, F. a kol.: Montáž v strojárskych a elektrotechnických výrobách, ALFA,Bratislava, 1990, ISBN 80-05-00609-9.
TECHNOCENTRUM CAD: CATIA V5 Assemby Design, Drafting. 500 strán, 2007, TC CAD Liberec, Czech Republic.
VALENTOVIČ, E.: Teória montáže, STU Bratislava, MtF Trnava, 1996

Language: *Slovak, English*

Remarks:

Evaluation history:
Total number of students being evaluated:

A	B	C	D	E	FX
15,91	38,64	22,73	13,64	2,27	6,82

Lecturers: *prof. Ing. Vojtěch Hrubý, CSc.*
Ing. Jozef Majerík, PhD.

Last modification: *15.4.2014*

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