

**Information sheet for the course
Production and renovation technologies**

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of special technology</i>					
Course unit code: <i>ŠST/B/3-21/d</i>			Course unit title: <i>Production and renovation technologies</i>		
Type of course unit: <i>compulsory</i>					
Planned types, learning activities and teaching methods: <i>Lectures - 2 hours weekly, laboratory seminars - 2 hours weekly</i>					
Number of credits: 5					
Recommended semester: <i>4st semester in the 2st year of study /full-time / 4st semester in the 2st year of study /part-time /</i>					
Degree of study: <i>I.</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>100% attendance on seminars, successful submission of the seminar paper, proof of acquired knowledge from the subject with using oral and written examination</i>					
Learning outcomes of the course unit: <i>Student has basic knowledge in the fields of engineering technologies and materials as are forming materials, dies, tools, filler materials, flux agents etc. This knowledge can be used to realize production process run as an optimal solution with specific production or renovation process. Student is also informed about basic principles of selected progressive mechanical engineering technologies.</i>					
Course contents: <i>The subject gives knowledge in fundamentals of casting, welding, forging and machining technology. The student learns to solve basic technological processes runs for production of castings, weldments or forged and machined parts. He also got the information about melting preparation and making of models, cores and complete moulds as well as welding methods, weldment preparation, filler materials and welding devices. The subject explain the principles of planar and volume forging methods at hot and cold conditions and metallurgical froging in a field of forging. The part about machining describes basic machining methods including tools and devices.</i>					
Recommended of required reading: <i>HRIVŇÁK, I.: Zváranie a zvariteľnosť materiálov, STU Bratislava 2009: ALFA, 468 s. ORSZÁGH, P. - ORSZÁGH, V.: Zváranie MIG/MAG ocelí a neželezných kovov, Polygrafia SAV, Bratislava, 2000. ORSZÁGH, P. - ORSZÁGH, V.: Zváranie TIG ocelí a neželezných kovov. DILLINGER, J. a kol.: Moderní strojírenství pro školu i praxi, EUROPA - SOBOTÁLES.cz., Praha 2007, 608 s. PTÁČEK, L. a kol.: Náuka o materiálu II., Brno: Akademické nakladatelství CERM, 2003</i>					
Language: <i>Slovak, English</i>					
Remarks:					
Evaluation history <i>Total number of students being evaluated: 0</i>					
A	B	C	D	E	FX
0	0	0	0	0	0
Lecturers: <i>Assoc. prof. Ing. Harold Mäsiar, CSc. Ing. Daniela Antalová, PhD.</i>					
Last modification: <i>15.4.2014</i>					
Supervisor: <i>prof. Ing. Jiří Balla, CSc., guarantee of the study program "Special Mechanical Engineering Technology".</i>					