

**Information sheet for the course**  
**Theory aside**

<b>University:</b> <i>Alexander Dubček University of Trenčín</i>					
<b>Faculty:</b> <i>Faculty of special technology</i>					
<b>Course unit code:</b> <i>ŠST/I/3-29/d</i>			<b>Course unit title:</b> <i>Theory aside</i>		
<b>Type of course unit:</b> <i>optional</i>					
<b>Planned types, learning activities and teaching methods:</b> <i>Type of course: Lecture / Seminar / Laboratory, Recommended extent of course (in hours):</i> <i>Weekly: 2/0/1 face to face</i>					
<b>Number of credits:</b> 3					
<b>Recommended semester:</b> <i>2<sup>nd</sup> semester in the 1<sup>st</sup> year (full-time)</i> <i>2<sup>nd</sup> semester in the 1<sup>st</sup> year (part-time)</i>					
<b>Degree of study:</b> <i>II. (engineer)</i>					
<b>Course prerequisites:</b> <i>none</i>					
<b>Assessment methods:</b> <i>100% participation in laboratory exercises (without no-show), transfer semestral project min. 50% attendance at lectures, demonstrate knowledge of subject content in written, practical and oral examination.</i>					
<b>Learning outcomes of the course unit:</b> <i>The student has knowledge of cross-department focusing on application usage at a level corresponding to the current state of knowledge, has extensive knowledge of the laws of the cutting process, and on this basis is able to design optimal machining processes.</i>					
<b>Course contents:</b> <i>Main characteristics of machining. The voltage and strain fields in the cutting zone. Schemes of forming chips. Secondary deformation up edge formation. Cutting resistance and cutting forces. The stability of the cutting process. Heat, heat balance in the cutting zone. The wear of the cutting edge and durability. Machinability and Reznos. Intensification and optimization of machining conditions.</i>					
<b>Recommended of required reading:</b> <i>BUDA, J. - SOUČEK, J. - VASILKO, K.: Teória obrábania, ALFA Bratislava, SNTL Praha, 1983</i> <i>BEŇO, J.: Teóriarezania kovov. Košice, VIENALA, 1999</i> <i>BÉKES, J. - HRUBEC, J. - KICKO, J. - LIPA, Z.: Teória obrábania, Bratislava, Vydavateľstvo STU, 1999</i> <i>CHLADIL - HUMAR: Teorie obrábění. Příklady a cvičení. Brno, VUT - FS, 1991</i> <i>FOREJT, M. - PÍŠKA, M.: Teorie obrábění, tváření a nástroje. CERM. Brno, VUT - FS, 2006</i>					
<b>Language:</b> <i>Slovak, English</i>					
<b>Remarks:</b>					
<b>Evaluation history:</b> <i>Total number of students being evaluated:</i>					
A	B	C	D	E	FX
0	0	0	0	0	0
<b>Lecturers:</b> <i>prof. Ing. Vojtěch Hrubý, CSc.</i> <i>Ing. Jozef Majerík, PhD.</i>					
<b>Last modification:</b> 15.4.2014					
<b>Supervisor:</b> <i>prof. Ing. Jiří Balla, CSc., guarantee of the study program "Special Mechanical Engineering Technology".</i>					