

## Information sheet for the course Introduction to university mathematics

<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>MŠT/B/4-03/d</i>			<b>Course unit title:</b> <i>Introduction to university mathematics</i>		
<b>Type of course unit:</b> <i>optional</i>					
<b>Planned types, learning activities and teaching methods:</b> <i>Exercise 2 hours per week, face to face method</i>					
<b>Number of credits:</b> <i>1</i>					
<b>Recommended semester:</b> <i>1<sup>st</sup> semester in the 1<sup>st</sup> year (full-time)</i> <i>1<sup>st</sup> semester in the 1<sup>st</sup> year (part-time)</i>					
<b>Degree of study:</b> <i>I. (bachelor)</i>					
<b>Course prerequisites:</b> <i>none</i>					
<b>Assessment methods:</b> <i>80% participation in exercises, fulfilling the objectives set exercises Term paper. Final Assessment: - demonstrate knowledge of subject content in written and oral examination.</i>					
<b>Learning outcomes of the course unit:</b> <i>Addition knowledge from high school, especially in the field of complex numbers and functions. In accordance with the subject Mathematics I deepen knowledge of the chapters of higher mathematics and especially in the differential count.</i>					
<b>Course contents:</b> <i>Complex numbers. The shapes of complex numbers. Graphical representation of complex numbers. Operations with complex numbers. The function of one real variable. The concept of ordered pairs. The domain functions. Range of the function. Some basic types of functions. Characteristics of each elementary functions. Graphs of elementary functions. Limit function. Calculation of limits. Derivatives. L'Hospital rules. During the investigation functions.</i>					
<b>Recommended of required reading:</b> <i>IVAN, J.: Matematika I, Bratislava 1983</i> <i>ELIAŠ, J.- HORVÁTH, J.- KAJAN, J.: Zbierka úloh z vyššej matematiky, časť I. (6. vyd.1985), časť II. (6.vyd.1985), časť III. (3. vyd.1980), Bratislava.</i> <i>KALINA, M.: Matematika. STU Bratislava, 2012. 297 s. ISBN 978-80-227-3655-8.</i> <i>www.svf.stuba.sk.</i>					
<b>Language:</b> <i>Slovak</i>					
<b>Remarks:</b>					
<b>Evaluation history</b> <i>Total number of students being evaluated: 6</i>					
A	B	C	D	E	FX
16,67	0	0	0	0	83,33
<b>Lecturers:</b> <i>Ing. Lenka Rybičková, PhD. - instructor</i>					
<b>Last modification:</b> <i>15.4.2014</i>					
<b>Supervisor:</b> <i>Assoc. Ing. Peter Lipták, PhD. guarantee of the study program "Mechanisms in Special Technology"</i>					