

## Information sheet for the course Constructive Geometry

<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/B/4-11/d</i>			<b>Course unit title:</b> <i>Constructive Geometry</i>		
<b>Type of course unit:</b> <i>compulsory</i>					
<b>Planned types, learning activities and teaching methods:</b> <i>2 hours of lectures, 2 hours of exercise per week, attendance teaching method</i>					
<b>Number of credits:</b> <i>4</i>					
<b>Recommended semester:</b> <i>1<sup>st</sup> semester in the 1<sup>st</sup> year /full-time/ 2<sup>nd</sup> semester in the 1<sup>st</sup> year /part-time/</i>					
<b>Degree of study:</b> <i>I.</i>					
<b>Course prerequisites:</b> <i>none</i>					
<b>Assessment methods:</b> <i>Continuous assessment: 100% attendance and active creative work on exercises meet the goals set exercises, mastery of technical terminology, min. 60% attendance at lectures, semester work properly. The ongoing evaluation is necessary to obtain min. 25 points out of a total of 50 points. Final assessment: test in a written test with emphasis on theoretical knowledge of the subject and the support of the oral response, which is verified mastering nature of theory of constructive geometry of curves, surfaces and imaging methods for various examples. Defend and explain the test questions and examples with additional queries. Of the 100 points is required to evaluate the minimum min. ∴ obtain (E) - 56 points, (D) - 67 points (C) - 77 points (B) - 87 points (A) - 95 points.</i>					
<b>Learning outcomes of the course unit:</b> <i>Student will complete a basic overview of the theory of curves, surfaces and imaging techniques, making use of two basic methods of constructive geometry, synthetic and analytical. This course helps develop spatial imagination and skill in the design and imaging components.</i>					
<b>Course contents:</b> <i>Vectors, Euclidean space <math>E_2, E_3</math>. Straight line and plane, analytically. Conic. In plane. Fundamentals of transformation. Properties of parallel and perpendicular projection. Prospective affinity. Imaging methods. Monge projection. Axonometria. Positional and metric problems in Monge projection and isometric. Slices of plane surfaces. Curves. Area. Rotating areas.</i>					
<b>Recommended of required reading:</b> <i>MEDEK, V., ZÁMOŽÍK, J.: Konštruktívna geometria pre technikov. Bratislava: Alfa, 1978. VRANKOVÁ, E., ZÁMOŽÍK, J., ZÁMOŽÍKOVÁ, Z.: Geometria. Trnava: PedF Trnavská univerzita, 2003. ORAVEC, G., RYBÁR, J., ZBUŇÁKOVÁ, E.: Konštruktívna geometria. Bratislava: Alfa, 1987. KARGELOVÁ, M., MERTL, P.: Konstruktivní geometrie. Praha: Vydavatelství ČVUT v Praze, 2009. STANOVÁ, E., OLEJNÍKOVÁ, T.: Zobrazovacie metódy v deskriptívnej geometrii. TU SvF, Košice, 2009.</i>					
<b>Language:</b> <i>Slovak</i>					
<b>Remarks:</b> <i>The subject is provided in the winter semester of the first year of full-time study. Subject is required.</i>					
<b>Evaluation history</b> <i>Total number of students being evaluated: 361</i>					
A	B	C	D	E	FX
5.82	6.37	20.76	23.27	36.29	0.0
<b>Lecturers:</b> <i>doc. RNDr. Daniela Hricišáková, CSc. - lecturer Ing. Ľudmila Šimoňáková, PhD. - assistant lecturer</i>					

**Last modification:** 15.4.2014

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