

**Information sheet for the course**  
**Exterior ballistics**

<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/1-44/d</i>			<b>Course unit title:</b> <i>Exterior ballistics</i>		
<b>Type of course unit:</b> <i>compulsory</i>					
<b>Planned types, learning activities and teaching methods:</b> <i>2 hours of lectures per week, 2 hours of practice per week</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)</i> <i>1<sup>st</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 exercises, fulfilling the objectives set exercises, min. 60% attendance at lectures, properly semester work, demonstrate knowledge of subject content in written and oral examination. Final evaluation - oral exam.</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, a broad knowledge and understanding in a specialized field, provide a comprehensive overview of the basic exterior ballistics, which is essential for the successful management of specialized subjects related to the construction of special equipment.</i>					
<b>Course contents:</b> <i>Basic concepts of external ballistics. Characteristics of the atmosphere and its importance for external ballistics. Forces and moments acting on the projectiles. Equations of motion projectiles contradictory environment. Methods for calculating the paths of projectiles. Typical track projectiles. Elliptical orbit rockets. Flat trajectory projectiles. Theory repairs. Dispersion trajectory of projectile. Stabilization projectile. Methods guided missiles and ammunition.</i>					
<b>Recommended of required reading:</b> <i>LIPTÁK, P. - JOZEFEK, M.: Fundamentals of exterior ballistics. TnUAD - FŠT 2009 (In Slovak)</i> <i>KODYM, P. - JIRSÁK, Č.: The exterior ballistics theory and shooting. Prague NV 1985 (In Czech)</i>					
<b>Language:</b> <i>Slovak</i>					
<b>Remarks:</b> <i>Course is compulsory</i>					
<b>Evaluation:</b> <i>Total number of students being evaluated: 70</i>					
A	B	C	D	E	FX
24,29	22,86	11,43	15,71	17,41	8,57
<b>Lecturers:</b> <i>Assoc.prof. Ing. Lubomír Uherík, CSc. - lecturer</i> <i>Ing. Ján Štrba, Ph.D. - instructor</i>					
<b>Last modification:</b> <i>15.4.2014</i>					
<b>Supervisor:</b> <i>prof. Ing. Jiří Balla, CSc., the guarantee of the "Special Mechanical Engineering Technology"</i>					