

Information sheet for the course Ammunitions and Explosives

University: <i>Alexander Dubček University of Trenčín</i>					
Faculty: <i>Faculty of special technology</i>					
Course unit code: <i>ŠST/B/1-43/d</i>			Course unit title: <i>Ammunitions and Explosives</i>		
Type of course unit: <i>compulsory</i>					
Planned types, learning activities and teaching methods: <i>2 hours of lectures per week, 2 hours of practice per week</i>					
Number of credits: <i>4</i>					
Recommended semester: <i>6th semester in the 3rd year of study /full-time / 6th semester in the 3rd year of study /part-time /</i>					
Degree of study: <i>I.</i>					
Course prerequisites: <i>none</i>					
Assessment methods: <i>100% participation in exercises, fulfilling the objectives set exercises properly prepared individual semester work, demonstrate knowledge of subject content in the oral examination.</i>					
Learning outcomes of the course unit: <i>The student will acquire a comprehensive overview of the construction and design of ammunition, its use and effects on the target. Learn to know the principles of the explosives, the types and characteristics. The list is by using various explosives in military, industrial production and mining of mineral resources. List with safety at work with munitions and explosives.</i>					
Course contents: <i>Explosives - distribution and use of explosives, propellants and pyrotechnic substances. Composition and foundations manufacture explosives. Thermodynamics and combustion processes. Basic design and distribution of ammunition. Initiating components of ammunition. Powder charge. Sub-calibre ammunition. Caseless ammunition. Medium and large-calibre ammunition. Effects of different types of bullets ammunition set. Rocket artillery ammunition. Anti-tank missiles. Antiaircraft missiles. Air missiles and bombs. Hand grenades. Mines - anti-personnel and anti-tank. Modular charges. Container ammunition. Ammunition for special purposes.</i>					
Recommended of required reading: <i>GALETA, A. - LIPTÁK, P. - BUKOVINSKÝ, I.: Ammunition, Explosives, Propellants part, Bratislava 2005 (In Slovak)</i> <i>GALETA, A. - Jozefek, M. - LIPTÁK, P.: Ammunition, Explosives, Part II - Initiating devices, Bratislava 2006 (In Slovak)</i> <i>ŠTRBA, J. - PIVKO, W.: Ammunition and Explosives: Part III - Explosives. Trenčín: TnUAD, 2013. 175 p. ISBN 978-80-8075-624-6 (In Slovak)</i> <i>Team of authors: Special equipment I. and II. 1st edition. Prague: Prague FMVS, 1976. 536 p. ISBN 59-154-75. (In Czech)</i>					
Language: <i>Slovak</i>					
Remarks: <i>Course is compulsory</i>					
Evaluation: <i>Total number of students being evaluated: 236</i>					
A	B	C	D	E	FX
7,44	20,26	13,06	17,85	41,39	0,00
Lecturers: <i>prof. Ing. Jiří Balla, CSc. - lecturer Ing. Ján Štrba, Ph.D. - instructor</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>					

