Information sheet for the course
Manufacture, testing and storage of ammunition

University: *Alexander Dubček University of Trenčín*

Faculty: *Faculty of special technology*

Course unit code: *ŠST/I/1-49/d*	**Course unit title:** *Manufacture, testing and storage of ammunition*

Type of course unit: *compulsory*

Planned types, learning activities and teaching methods:
Lecture 2 hours/laboratory exercises 1 hour per week, semester work, face to face

Number of credits: *3*

Recommended semester: *4th semester in the 2nd year (full-time)*
6th semester in the 3rd year (part-time)

Degree of study: *II. (engineer)*

Course prerequisites: *none*

Assessment methods:
100% participation in exercises, fulfilling the objectives set exercises properly prepared individual semester work for credit.

Learning outcomes of the course unit:
The student will acquire a comprehensive overview of the manufacture of explosives, quality assessment explosives manufacture cartridges and various kinds of bodies small arms ammunition and artillery ammunition. They will master the method of filling projectiles of explosives. List yourself with the storage and handling of explosives, ammunitions, with tests of ammunitions after manufacture and the evaluation of its quality during storage.

Course contents:
Basic concepts of explosives. Production of propellant and explosives. Examination and determination of the qualitative and quantitative characteristics of explosives. Determination of oxygen balance explosives. Production and selection of material in the manufacture of cartridges. Production and selection of material in the production of projectiles. Calculation and check the strength of artillery projectile HE-FRAG type. Storage and handling of explosives and ammunition. Quality assessment of stored ammunition.

Recommended of required reading:
GALETA, A. - LIPTÁK, P. - BUKOVINSKÝ, I .: Ammunition, and Explosives, Propellants part, Bratislava 2005 (In Slovak)
GALETA, A. - Jozefek, M. - LIPTÁK, P .: Ammunition and Explosives, Part II - Initiation devices, Bratislava 2006 (In Slovak)
ŠTRBA, J. - PIVKO, W .: Ammunition and Explosives: Part III - Explosives. Trenčín: TnUADv Trencin, 2013. 175 p. ISBN 978-80-8075-624-6 (In Slovak)
GREXA, J. - BEER, S .: Ammunition I., Brno 1986 (In Czech)
KOMENDA, J .: Ammunition II., Brno 1991 (In Czech)
Team of authors: Special equipment I. and II. 1st edition. Prague: FMVS Prague, 1976. 536 p. ISBN 59-154-75 (In Czech)

Language: *Slovak*

Remarks:
Subject is required.

Evaluation history: *Total number of students being evaluated: 75*

A	B	C	D	E	FX
4,00	4,00	30,67	14,67	45,33	1,33

Lecturers: *Ing. Ján Štrba, Ph.D. - lecturer and instructor*

Last modification: *15.4.2014*

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