

Lesson plan: FIRE CONTROL

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Activities	1. Course description
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	3. The continuity of the course
	4. Syllabus
	5. Assessment methods

Activity no. 1	Course description
	Studying in the course is focused on the theory of tactical and technical fire control of artillery, cooperation between individual elements of the fire control system and principles of fire support for mechanized units and unions by artillery.

Activity no. 2	Outputs of tertiary education	
	Graduates of the relevant course will demonstrate:	
	Knowledge:	<ul style="list-style-type: none"> - Discusses rules of shooting and fire control of ground artillery, - Reproduces the foundations of the theory of shooting, - Analyzes the possibility of firing artillery units, - Presents conditions which affect the accuracy of fire, - Classifies kinds of targets for artillery fire, - Selects the method for determining the elements of fire and effect on targets, - Explains the relationships and values for artillery firing, - Creating diagrams / drawings of ways how adjust the fire on targets and how to realize effective fire, - Describes the procedure of determining the values and ratios of firing for each method of adjust fire, fire for effect and control of fire, - Describes the procedure for determining the corrections

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		for fire, - Describes the procedure for guidance documentation.
	Skills:	<ul style="list-style-type: none"> - Assesses conditions that affect the accuracy of fire, - Evaluate the possibility of firing of artillery units, - Uses the established instruments and equipment to perform specialized tasks in accordance with their capabilities and limitations and these skills is able to use in planning and implementing special projects, - Arrange the preparation of fire control - Determines the elements for fire of artillery units using funds established in the Czech Army, - Determines how to adjust the fire on targets, - Manages the adjust fire and effective fire of artillery units, - Calculates the consumption of ammunition on the target and methodology of fire, values and ratios for firing, - Handles the fire and technical documentation.
	General competencies:	<ul style="list-style-type: none"> - Is able to analyze the performance conditions of firing tasks, take measures to create conditions for their effective performance and decide the most appropriate ways of decommissioning targets, - Is able to organize and manage the activities of subordinate due to preparation and fire control, issue regulations, orders and commands and reporting to commander.

Activity no. 3	The continuity of the course: Fields of study the course is directly associated with:
	<p>predecessors:</p> <ul style="list-style-type: none"> - Using of artillery units - Reconnaissance, topographical and meteorological activity of artillery <p>successors:</p> <ul style="list-style-type: none"> - Artillery Tactics

Activity no. 4	Syllabus
	<p>7th semester</p> <p>T 1 - Fundamentals of the firing activity of artillery units. (4P, 4C) Basic terminology apparatus. The trajectory of artillery projectiles. (P) Angular extent in the artillery. Miles rule. Variance and its regularity. (P) The probability of hitting the target. Tables of firing. (C) Fire safety measures and fire control and fire support coordination. (C)</p> <p>T 2 - The simplified preparation. (2P, 4C) Terms of Use. Principles of determining the values and ratios for artillery fire. (P) Determining the elements for fire due to simplified preparation. (C) Artillery commands. Determining the approximate corrections. (C)</p>

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T3 - Determining the elements for fire due to of substitute instruments. (2P, 8C)

The principles of using the kit PUO 9M. (P)
Plotting points and targets. (C)
Determination of target coordinates. (C)
Determining topographic elements. (C)
Diagram of corrections. (C)

8th semester

T 4 - Determining the elements for fire due to of substitute instruments. (2C)

Determining the corrections during adjust fire and determining the calculated corrections.(C)

T 5 – Adjusting fire without utilization of artillery survey. (6P, 16C)

Methods of adjust fire and their principles. Principles of observation of explosions. General principles of adjust fire. (P)
Form of fire and determining the values and ratios for artillery fire. (C)
The principles for determining the elements for effective fire due to adjust fire without utilization of artillery survey. (P)
The principle, conditions and procedure of adjust fire due to framing using different sizes of observation angle. (C)
The principle, conditions and procedure of adjust fire using OT-factor. (C)
The principle, conditions and procedure of adjust fire using setting scale of fire. (C)
The principle, conditions and procedure of adjust fire using a stopwatch. (C)
The principle, conditions and procedure of adjust fire using successive inspections by the compass directions. (C)
The principle, conditions and procedure of adjust fire using scale. (C)
Principles of observation and identification of deviations corrections during adjust fire, principles of management and correction of effective firing. (P)
Determining corrections during adjust fire, realizations and corrections of effective firing. (C)

T 6 – Adjust fire with utilization of artillery survey. (6P, 12C)

The principle, conditions and procedure of adjust fire using laser rangefinder. (P)
Adjust fire with laser rangefinder I. (C)
Adjust fire with laser rangefinder II. (C)
The principle, conditions and procedure of adjust fire using designated observation. (P)
Adjust fire with designated observation I. (C)
Adjust fire with designated observation II. (C)
Adjust fire with designated observation III. (C)
Principles of observation of deviations and identification of corrections during adjust fire, principles of realization and renovation of effective firing. (P)
Cooperation of fire and reconnaissance units. (C)

T 7 - Specific types of firing. (6P, 10C)

The principle, conditions and procedure of reflection firing. (P)
The principle, conditions and procedure of steep trajectory firing. (P)
The principle, conditions and procedure of firing with missiles with non-contact lighters. (P)
Determining the angle of impact, the choice of filling, procedure of reflection fire. (C)
Setting of lighter, assessment of impact and burst. (C)
Procedure of adjust fire during steep trajectory firing, switching to a different fill. (C)
Use B-90 and HS-94 lighter and determining the height of burst, procedure of adjust fire by timed and shocked fire using lighter B-90's. (C)
Principles of observation of deviations and identification of corrections during adjust fire, realization and renovation of effective firing at each specific kinds of firing. (C)

8 - Preparation of artillery fire control units. (2P)

Survey and finding targets, ballistic, meteorological, topographic-geodetic and technical preparation. (P)



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	<p>T 9 - The act during the performance of individual tasks firing. (10LE) Principles of observation of deviations and identification corrections during adjust fire I. (LE) Principles of observation of deviations and identification corrections during adjust fire II. (LE) Principles of observation of deviations and identification corrections during adjust fire III. (LE) Principles of observation of deviations and identification corrections during adjust fire IV. (LE) Policy guidance of realization and renovation of effective Firing. (LE)</p> <p>T 10 - Activity in Chief of the place of fire control position (NMRP). (8LE) Organization of determining of fire elements for simplified firing preparation. (LE) Organization of determining of fire elements for abridged firing preparation. (LE) Identification and control of calculated fire elements. (LE) Commands, regulations and reporting. (LE)</p> <p>T 11 - Cooperation the Chief of MRP with artillery reconnaissance units and with arithmetician man. (8LE) Adjusting fire of targets by artillery units. (LE) Adjusting fire without utilization of artillery survey. (LE) Adjust fire with utilization of artillery survey. (LE) Determining of correction during adjust fire. (LE)</p> <p>T 12 - Keeping the firing and technical documentation. (7LE) Commands, regulations and reports I. (LE) Commands, regulations and reports II. (LE) Keeping a form of firing and firing tables of numbered elements of battery I. (LE) Keeping a form of firing and firing tables of numbered elements of battery II. (1/2 LE)</p>
Activity no. 5	<p>Assessment methods</p> <p>7th semester - credit - individual, written and oral</p> <p>8th semester - Collective comprehensive professional practice of artillery module during the field exercises training + exam - individual, oral</p>

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