

APPROVAL SHEET
OF THE COURSE CURRICULUM
PROFESSIONAL MILITARY EDUCATION
TACTICAL LEVEL COMMAND COURSE
MANAGEMENT OF THE OPERATION OF MUNITIONS,
L-1C (MOM)

by military speciality 707400 "Management of the operation of munitions"

APPROVED

Director of the Department of Military
of Education and Science of the Ministry
of Defence of Ukraine

Volodymyr MIRNENKO

_____ 20__ year

APPROVED

Head of the Central Directorate of
Military Education and Science of the
General Staff of the Armed Forces of
Ukraine
Colonel

Oleh PAVLOVSKY

_____ 20__ year

APPROVED

Commander of the Logistics Forces
of the Armed Forces of Ukraine
Brigadier General

Volodymyr KARPENKO

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Developed and introduced

Chairman of the working group

Deputy Head of the Central Directorate for
Provision of Weapons of the Logistics
Forces Command of the Armed Forces of
Ukraine
Colonel

Serhii NAUMENKO

_____ 20__ year

PREFACE

Developed by the working group of the Logistics Forces Command of the Armed Forces of Ukraine and the Military Academy (Odesa).

Order of the Commander of the Logistics Forces of the Armed Forces of Ukraine dated 01 March 2024 No. 60.

The chairman of the working group is:

Colonel Serhii NAUMENKO, Deputy Head of the Central Department for Provision of Weapons of the Logistics Command of the Armed Forces of Ukraine.

Members of the working group:

Colonel Stanislav NIKUL, Head of the Department of Missile and Artillery Armament of the Faculty of Missile and Artillery Armament Specialist Training of the Military Academy (Odesa), PhD in Engineering, Associate Professor;

Colonel Oleh KRAVCHUK, Professor of the Department of Missile and Artillery Armament, Faculty of Missile and Artillery Armament Specialists Training, Military Academy (Odesa), PhD in Engineering, Senior Researcher;

Viacheslav GOLOVAN, Professor of the Department of Missile and Artillery Armament of the Faculty of Missile and Artillery Armament Specialists of the Military Academy (Odesa), PhD in Engineering, Professor, member of the Armed Forces of Ukraine.

ACCOUNTED FOR:

- 1. Professional standard of a tactical officer of the Armed Forces of Ukraine.*
- 2. Comments from internal and external stakeholders.*
- 3. Proposals from students.*
- 4. Experience in combat operations.*

1. PROFILE OF THE STUDY PROGRAMME

PROFESSIONAL MILITARY EDUCATION COURSE

1 - General information	
Full name of the higher education institution (HEI)	Military Academy (Odesa)
Name of the document on completion and scope of the educational programme of the professional military education course	Certificate of completion of the educational programme of the professional military education course of the tactical level command course (L-1C) MOM: MOS 707400. Scope of the educational programme: 19 ECTS credits.
Background	A higher education degree of at least a bachelor's degree; Completion of a professional course at the L-1B tactical level.
Language(s) of instruction	Ukrainian (English)
Validity of the vocational education programme	Until a new educational programme is updated or introduced.
2 - Objective of the curriculum of the professional military education course	
<p>Training of a tactical officer who is competent in the management of the operation of munitions, capable of performing assigned tasks in positions with the rank of captain, carrying out professional activities in accordance with official duties, being a leader in a military team, making decisions in accordance with the requirements of governing documents and critical analysis of the situation, being responsible for them, and being responsible for subordinates.</p> <p>Performance of official (special) duties that determine the scope of tasks assigned by the position and other regulatory acts.</p>	
3 - Characteristics of the curriculum of the professional military education course	
Subject area	Field of knowledge: "25 Military sciences, national security, state border security"; Speciality: "255 Operation and repair of rocket and artillery weapons"; Specialisation: "Management of the operation of munitions".
The main focus of the vocational education programme	Professional military education for military service in typical positions defined in the professional standard of a tactical officer.
Features of the programme	Training in the system of multi-level professional military education of officers of the Armed Forces of Ukraine. Features of the combat experience of the Russian-Ukrainian war.
4 - Suitability of graduates for employment and further education	
Suitability for employment	Typical positions of persons with the rank of captain, as defined in the professional standard for tactical level officers: - engineer of the production and technical department; - engineer (artillery ammunition, explosives and powders department) of the quality control centre; - engineer of the ammunition storage department; - Engineer of the ammunition assembly and repair shop (cartridge case repair);

	<ul style="list-style-type: none"> - Engineer of the Accounting and Operations Department; - Commander of the rigging company; - Junior Researcher at the Research Department; - Head of an accounting and operations group (department); - Assistant Chief of Missile and Artillery Armament Service (destruction means, provision of close combat equipment and reconnaissance and surveillance devices) of a brigade (regiment, centre); - Senior engineer of the production and technical department (division); - Senior Engineer (bench testing department) of the arsenal's ammunition quality control centre; - Senior Engineer of the Technical Control Department; - Senior Engineer of the Accounting and Operations Department; - Senior engineer at the guided missile repair shop (assembly and repair of ammunition, repair of shell casings); - Senior Officer of the Security Duty Department; - Senior Assistant to the Head of the Ammunition Storage Department.
Further training	Training under the educational programme of the tactical level command and staff course (L-2) of professional military education.
5 - Teaching and assessment	
Teaching and learning	The main types of classes used to teach the components of the educational programme are: lectures; seminars, group, practical, group exercises; tactical (tactical and formation, tactical and special) independent classes, including at the field training base.
Evaluation	Assessment of the learning outcomes of course participants includes the full range of control measures provided by the programmes of academic disciplines and is carried out on a 100-point scale, ECTS scale and national scale.
6 - Programme competences	
Military and professional competences (MIC)	MPC 1 The ability to plan, organise and conduct the main types of combat (combat actions, operations), navigate in complex combat conditions, as well as to plan the decision-making process according to NATO standards (MDLP).
	MPC 2 Ability to organise and plan technical support for a military unit in various types of combat.
	MPC 3 Ability to organise the work of chiefs of support services of a military unit in everyday activities and various types of combat, to work with electronic accounting systems for destruction of material and technical means, to use special software modules.
	MPC 4 Ability to motivate people and move towards a common goal, to ensure psychological stability, personal safety and security of personnel in the process of solving the unit's tasks, to provide first aid in various situations.
Military-specific competences (MSC)	MSC 1 Ability to organise and manage the operation of munitions.
7 - Programme learning outcomes	

Military professional training (LOMP)	LOMP 1 Know and understand the processes of planning, organising and conducting major types of combat (combat actions, operations), and be able to make decisions in accordance with NATO standards (MDLP).
	LOMP 2 Be able to organise and plan technical support for a military unit in various types of combat.
	LOMP 3 Be able to organise the work of chiefs of support services of a military unit in everyday activities and various types of combat, work with systems of electronic accounting of munitions and material and technical means, use modules of special software.
	LOMP 4 Be able to motivate people, ensure psychological stability, personal safety and security of personnel in the process of solving unit tasks.
Military specialised training (LOMS)	LOMS 1 Be able to organise and manage the operation of munitions.
8 - Resource support for programme implementation	
Human resources support	<p>The academic staff involved in the educational programme are full-time employees of the Military Academy, some of whom have academic degrees, academic titles and a proven level of scientific and professional activity. Professional competences are developed by professionals with professional experience.</p> <p>The practice-oriented nature of the educational programme involves the wide participation of practitioners who are relevant to the programme, which enhances the synergy between theoretical and practical training.</p> <p>The head and members of the working group on the development of the programme, as well as the teaching staff that ensures the implementation of the educational programme meet the requirements set by the Ministry of Defence of Ukraine</p>
Logistical support	<p>The material and technical base of the Military Academy (Odesa) and the Centre for Supporting the Educational Process of the Military Academy is used to implement the competencies and learning outcomes specified in the educational programme. The material and technical support meets the requirements for the provision of educational services and is sufficient to ensure the quality of the educational process, in particular: classrooms; computer classes (laboratories); specialised laboratories; gyms, sports grounds; library, reading room; multimedia equipment; premises for research and teaching staff; barracks premises; dining room, etc.</p>
Information and educational support	<p>Teaching and learning materials are developed in accordance with the current regulatory and legislative documents of the Ministry of Education and Science of Ukraine and orders of the Ministry of Defence of Ukraine, and consist of the following materials:</p> <ul style="list-style-type: none"> instructional and methodological materials for practical classes; teaching materials for all types of training sessions; methodological instructions for the execution of works (projects); methodological guidelines for organising independent work; programmes of all types of practical training; diagnostic tools.

	<p>The library fund is used in teaching, including teaching materials, educational and methodological developments of teaching staff.</p> <p>The programme is implemented using the virtual learning environment of the Military Academy (Odesa), author's developments, textbooks and manuals, and other teaching and learning materials.</p> <p>The official website of the Academy (http://vaodesa.mil.gov.ua/) contains information on educational, scientific and educational activities, structural units, admission rules, contacts, and users have the opportunity to use all available library resources. There is technological and material and technical support for the educational process.</p>
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2. LIST OF COMPONENTS OF THE CURRICULUM OF THE PROFESSIONAL MILITARY EDUCATION COURSE AND THE CORRESPONDENCE OF PROGRAMME COMPETENCES AND LEARNING OUTCOMES TO THE COMPONENTS OF THE CURRICULUM

2.1. List of components of the EP

Code n/disc.	Components of the educational programme (academic disciplines/modules)	Quantity loans	Form of final control
MP 01	Mechanised (motorised infantry) brigade in combat and operations	3	Examination
MP 02	Organisation of technical support	4	Examination
MP 03	Organisation of the work of the head of the support service	4	Examination
MP 04	Military leadership: leader's influence on the team	3	Examination
MS 01	Management of the operation of munitions	5	Examination
Total under the loan programme		19	

2.2 Correspondence of programme competences to the components of the study programme

	MP 01	MP 02	MP 03	MP 04	MS 01
MPC 1	+				
MPC 2		+			
MPC 3			+		
MPC 4				+	
MSC 1					+

2.3 Relevance of learning outcomes to the components of the study programme

	MP 01	MP 02	MP 03	MP 04	MS 01
LOMPC 1	+				
LOMPC 2		+			
LOMPC 3			+		
LOMPC 4				+	
LOMSC 4					+

3. DISTRIBUTION OF THE EDUCATIONAL PROGRAMME COMPONENTS

No. s/n	Academic discipline code	Name of the discipline (module)	Distribution by semester		Number of ECTS credits	Number of hours						Independent work	Classroom hours by course and semester*			
			examinations	differentiated tests		Total volume	Audit				Control measure		1st year		2nd year	
							In total	including					Semesters			
								lectures	group, seminars	practical, laboratory			1	2	3	4
			Number of weeks in the semester													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	MP 01	Mechanised (motorised infantry) brigade in combat and operations		2 semesters - 4 hours.	3	90	42	10	10	20	2	48	1,47	1,53		
2	MP 02	Organisation of technical support	4 semesters - 6 hours.	3 semesters - 2 hours.	4	120	60	4	18	30	8	60			2	2
3	MP 03	Organisation of the work of the head of the support service	4 semesters - 4 hours.	3 semesters - 2 hours.	4	120	60	6	28	20	6	60			2	2

4	MP 04	Military leadership		1 semester - 2 hours.	3	90	44	-	30	12	2	46	3			
5	MS 01	Management of the operation of munitions	2 semesters - 4 hours.	1 semester - 4 hours.	5	150	74	2	60	4	8	76	3	2		
That's it:					19	570	280	22	146	86	26	290	7,47	3,53	4	4
Total number of																
Number of hours per week																
Number of exams														1		2
Number of differentiated tests (credits)													2	1	2	

4. PROGRAMME OF ACADEMIC DISCIPLINES OF THE EDUCATIONAL PROGRAMME

Mechanised (motorised infantry) brigade in combat and operations

The general objective of the educational programme component:

As a result of studying the discipline, the student should

know:

the processes of planning, organising and conducting the main types of combat (combat actions, operations);

the procedure for the development and execution of combat and other documents;

be able to:

make decisions according to NATO standards (MDLP);

develop and execute combat and other documents;

make optimal decisions based on the analysis of the information received and the situation;

make informed decisions in combat conditions, solve atypical tasks, give orders (instructions), and be responsible for their execution;

assess and predict the development of the tactical situation;

justify the combat tasks assigned;

organise the implementation of comprehensive support measures.

Organisational and methodological guidelines:

The methodology of teaching a discipline is based on the basic principles of didactics (theory of reasoning and learning). It provides a scientific and pedagogical description of the forms and methods of teaching, indicates the most appropriate combinations to achieve a certain level of learning, and determines the conditions for their most effective use.

To achieve the main learning objective, the programme provides for the following forms of learning:

frontal form of training, when all students perform the same task at the same time under the supervision of a teacher;

group form of training, when students are combined into groups (departments) depending on the staffing structure of the unit, which work in parallel;

individual form of training, when students complete tasks sequentially, one by one.

At the same time, depending on the need to achieve the levels of knowledge or skill, the teacher should use the following methods:

verbal and visual;
training;
situational and cognitive.

A verbal and visual method in which the teacher systematically and consistently presents the educational material, shows (demonstrates) the subjects studied in order for students to gain new knowledge and form the appropriate imagination.

The training (reproductive) method consists in performing complex actions in accordance with an algorithm (pre-established procedure) determined by the training leader to develop the necessary skills and ensure the coherence of military organisational structures.

Situational and cognitive - in reviewing and discussing real (probable) actions, learning about the experience of commanding troops (forces) in military conflicts and developing skills in information and analytical activities.

The above methods provide students with knowledge, skills, and abilities, but to develop their creative abilities, the class leader should use problem-based learning methods.

Problem-based teaching is when the class leader poses a problem to the students, solves it himself, but at the same time shows the ways of solving it, reveals the course of his thought. The immediate result of problem-based teaching should be that the student learns the method and logic of solving a particular problem, but not yet the ability to apply it independently. This method teaches students how to search for knowledge and helps them develop creative thinking skills.

The search (heuristic) method serves the purpose of gradually bringing students closer to solving problems on their own by first teaching them how to perform certain elements of the solution. It is used during group exercises when the method of finding the optimal solution is determined by the class leader, but the solution is found by the trainee.

Problem-based methods provide a deep assimilation of knowledge at the level of its creative application, mastery of creative thinking methods, and practical experience.

During lecture classes:

A lecture is the main type of training session designed to teach the theoretical material of a topic.

The main purpose of the lecture is to systematise the foundations of scientific knowledge and practical experience on the topic, the state and prospects of development of management science, theory and practice of military leader's management activities, to focus on the most complex and nodal issues of the educational material. The lecture should be problem-based, stimulate active cognitive activity of students, and promote creative thinking. In order to enhance the cognitive activity of

servicemen and to develop their creative thinking, technical teaching aids should be skilfully used during lectures in combination with active forms and methods of lecturing. Classes should be conducted using the method of oral presentation of educational material, with individual questions and educational elements worked out in the form of a dialogue between the teacher and the students and by asking them problematic questions.

During group classes:

A group lesson is a type of training session during which the teacher presents new educational material in a verbal and visual way, controls the students' learning of this material by questioning them and helps to consolidate it.

Group classes are held to enable students to study in detail the issues and problems discussed in lectures and to consider in detail topical issues of the course material. The main teaching methods are explanation with demonstration and discussion. Technical means of information transmission, tables, diagrams, slides, diaphragms and posters should be used to ensure visualisation during the classes.

During practical training:

Practical training is a type of training session during which the teacher organises the mastering of the theoretical provisions of the topic through the individual performance of specially designed tasks and promotes the development of skills and abilities to apply these theoretical provisions in practice.

Practical classes should be aimed at consolidating and deepening the knowledge gained by students in lectures and group classes, as well as during independent work, and at developing their skills in solving practical problems in their speciality.

When organising independent work:

Independent work should be carried out with the aim of working out and mastering the educational material; consolidating and deepening knowledge, skills and abilities; preparing for the next classes and control measures; forming a culture of mental work, independence and initiative in the search, acquisition and enrichment of knowledge among students.

Independent work should be provided with educational literature, study guides, assignments and methodological recommendations. All teaching and learning materials should have electronic versions. Methodological materials for independent work should provide for the possibility of self-control.

Logistics:

Classes should be held in specialised classrooms, which should be equipped with personal electronic computers at the rate of one workstation per two students and at the training centre's training ground. It is mandatory to use technical training aids during the training sessions.

Information and methodological support:

1. BP 3-(01,04)11(55).01 Temporary Combat Statute of the Mechanised Forces of the Land Forces of the Armed Forces of Ukraine, Part I (Brigade), approved by Order of the Commander of the Land Forces of the Armed Forces of Ukraine No. 152 dated 09.03.2021.
2. The Combat Statute of the Mechanised and Tank Troops of the Land Forces of the Armed Forces of Ukraine, Part I (Brigade, Regiment): CSR, 2017 . - 384 p., classified.
3. Combat Regulations of the Mechanised and Tank Troops of the Land Forces of the Armed Forces of Ukraine, Part II (Battalion, Company), approved by Order of the Commander of the Land Forces of the Armed Forces of Ukraine No. 564 of 30.12.2016 as amended.
4. Temporary Combat Statute of the Airborne Assault Troops of the Armed Forces of Ukraine, Part II (Battalion) - K. KDSHV, 2019. 260 p.
5. Temporary Combat Statute of the Airborne Assault Troops of the Armed Forces of Ukraine, Part III (Company) - K. KDSHV, 2019. 230 p.
6. Military manual VP 1.0 "Military leadership." -K. General Staff of the Armed Forces of Ukraine, 2016. 29 p.
7. Dembovsky B.M. Basic provisions of defensive combat. Preparation and conduct of defence by a brigade. - Kyiv: NAOU, 2002. - 104 p., secret, inv. 418.
8. Principles of training and use of the Armed Forces of Ukraine. Part II (preparation and conduct of operations of the Armed Forces of Ukraine). K: GSH, 2007. -.189 p., secret, inv. 1964.
9. General tactics. The work of the regimental commander and staff in organising defence - Odesa: OISV, 1997. 44 p., dsc, p.107.
10. The use of mechanised units in the performance of special tasks in modern armed conflicts. - Nauka i tekhnika, 2008. - 98 p.
11. Methodological recommendations on the preparation and use of units and subunits during the ATO - KVDV (No. 1390/1DSC of 10.09.14).
12. International Law: Military Aspects - K.: NAOU Publishing House, 2003. - 252 p.
13. Methodological recommendations on the actions of units within the UN peacekeeping forces in areas of military conflict / Ministry of Defence of Ukraine. - K.: LC Maker, 2004. - 87 p.
14. Training manual "Peculiarities of preparation and conduct of combat operations against illegal armed groups by mechanised (tank) units in urban and mountainous areas." -Od.

15. Training manual "Development of views on the preparation and conduct of special operations in armed conflicts." - Sumy: Mriya-1 Publishing House, 2004. 152 p.
16. Training organisational and staffing structure of the units of the Armed Forces of Ukraine. - Odesa: OISV, 2005. 88 p.
17. Training manual "Purpose, tasks, training organisational structure and combat capabilities of the brigades of the main defence forces and the rapid response corps." - K: NAOU, 2002. - 31 p., classified, inv. 417.
18. Instruction on the operational work of military command and control bodies of the Armed Forces of Ukraine. K.GSh, 2008. - 266 p., secret, inv.1601.
19. Operational Intelligence Guidelines. -Kyiv: DIU, 2009. - 234 p., classified, inv. 1793.
20. Guidelines on Radiation, Chemical and Biological Protection of the Armed Forces of Ukraine - K.: General Staff of the Armed Forces of Ukraine, 2009. 80 p., classified, inv. 1666.
21. Organisation, armament and tactics of actions of units of the probable enemy. - Odesa: OISV, 2005. 67 p.
22. Textbook "General Tactics". Part I. Defence - K. 2011. 372 p., classified, inv.2295.
23. Textbook "General Tactics". Part II. The Offensive - K. 2011. 344 p., secret, inv.2296.
24. Textbook "General Tactics". Part III. Participation of the Brigade in Special Operations - K. 20113. 212 p., secret, inv.2297.
25. Handbook: "The Law of War." - K.: Liubava Publishing House, 1997. - 128 p.
26. Field Manual of the US Army. Conduct of Combat Operations. FM 3-07 2008.
27. Prospects for the development of weapons and military equipment of the Armed Forces of Ukraine for the period up to 2025. Proceedings of the Interdepartmental Scientific and Practical Conference. -Kyiv: Central Research Institute of Military Equipment, 2009. - 292 p., classified, inv. 1715.
28. Working materials based on the results of the work of mobile groups in operational and tactical groups. - VNU GS of the Armed Forces of Ukraine, 2016, inv.2488.-85p.
29. Recommendations for Mechanised Units on Actions on the Battlefield in Modern Conditions - K.: Main Combat Training Department of the Main Command of the Land Forces of the Armed Forces of Ukraine, 2002. 45 p.
30. Recommendations on the preparation and conduct of actions for mechanised and tank units during the termination of the conflict, disarmament and liquidation of illegal armed groups - K.: Main Department of Combat Training of the Main Command of the Land Forces of the Armed Forces of Ukraine, 2002. - 79 c.

31. Generalised materials on the analysis of the performance of tasks by the military units of the Armed Forces in the course of the ATO.

32. Generalised materials of the analysis of preparation and conduct of operations (combat actions) by the troops (forces) of the Armed Forces of Ukraine during the ATO.

33. TCP 7-000(162)01.01 "Collection No. 1 of Materials for Studying the Combat Experience of the Russian-Ukrainian War of 2022." - Kyiv: GUDtAP of the General Staff of the Armed Forces of Ukraine, 2022.

34. TCP 7-000(162) 01.02 "Collection No. 2 of Materials for Studying the Combat Experience of the Russian-Ukrainian War of 2022." - Kyiv: GUDtAP of the General Staff of the Armed Forces of Ukraine, 2022.

35. TCP 7-000(162)01.03 "Collection No. 3 of Materials for Studying the Combat Experience of the Russian-Ukrainian War of 2022." - Kyiv: GUDtAP of the General Staff of the Armed Forces of Ukraine, 2022.

TCP 7-000(162)01.04 "Collection No. 4 of Materials for Studying the Combat Experience of the Russian-Ukrainian War of 2022." - Kyiv: GUDtAP of the General Staff of the Armed Forces of Ukraine, 2022.

Information resources

1. Website of the Military Academy (Odesa). www.vaodessa.org.ua.
2. Electronic library of the Military Academy (Odesa) (internal network). <http://192.168.1.254/>.
3. Electronic library of the Department of Missile and Artillery Armament (internal network of the Military Academy (Odesa)). <http://192.168.1.254/index.php/kafedra-rao>.
4. Website of the Ministry of Defence of Ukraine. <http://www.mil.gov.ua/>.

Titles of topics and distribution of study time by type of study session

№ s/n	Types of training sessions, control measures	Total hours	Among them.		Topic title and study questions
			Training sessions	Independent work	
1	2	3	4	5	6
		28	14	14	Section I. Purpose, tasks, weapons and combat equipment of the mechanised brigade and its units. Fundamentals of combat employment.
		20	10	10	Topic 1: Purpose, organisational and staffing structure of a mechanised (motorised infantry) brigade and its structural units
1.	Lecture	2	2	2	<p>Lesson 1 Organisational structure, weapons and combat equipment of a mechanised (infantry) brigade.</p> <p>1. Purpose and tasks of a mechanised (motorised infantry) brigade in tactical warfare. Organisational and staffing structure of a mechanised (<i>infantry</i>) <i>brigade</i>.</p> <p>2. Weapons and military equipment of SMIBde (SMBde).</p> <p>Independent work</p> <p>1. Organisational and staffing structure of the task and purpose of the SMIBde (SMBde) units.</p> <p>2. Weapons and military equipment of the SMIBde (SMBde).</p>
2.	Group session	2	2	2	<p>Lesson 2: Organisational and staffing structure and basics of combat employment of artillery and mortar units.</p> <p>1. Organisational and staffing structure and specifications of the main models of weapons of the artillery and mortar units.</p> <p>2. Fundamentals of combat use of artillery in the course of combat operations. Organisation of fire damage.</p> <p>Independent work</p> <p>1. Fundamentals of combat use of artillery in combat operations.</p> <p>2. Organisation of enemy fire damage.</p> <p>3. Technical specifications of the main models of weapons of the artillery and mortar units.</p>
3.	Group session	2	2	2	Lesson 3: Organisational and staffing structure of air defence units of the SMIBde, basics

					<p>of their combat use.</p> <ol style="list-style-type: none"> 1. Fundamentals of air defence of ground forces. 2. Organisational and staffing structure of the air defence units of the SMIBde (anti-aircraft missile and artillery division of the brigade, anti-aircraft missile (rocket-artillery, self-propelled artillery, artillery) battery, separate radio battalion) and their combat capabilities. 3. Purpose, composition and technical characteristics of the main types of weapons of the air defence units of the airborne battalions. <p>Independent work</p> <ol style="list-style-type: none"> 1. Fundamentals of air defence of ground forces. 2. Organisational and staffing structure of air defence units of the SMIBde and their combat capabilities. 3. Purpose, composition and technical characteristics of the main types of weapons of the air defence units of the airborne battalions.
4.	Group session	2	2	2	<p>Lesson 4. Organisational and staffing structure of the airborne forces, reconnaissance company, CBRN company, basics of their combat use.</p> <ol style="list-style-type: none"> 1. Organisational structure, weapons, capabilities of air defence and principles of use. 2. Organisational and staff structure and weapons of the reconnaissance company. Combat capabilities and basics of application. 3. Organisational and staff structure and weapons of the CBRN company. Combat capabilities and basics of use. <p>Independent work</p> <ol style="list-style-type: none"> 1. Organisational structure, weapons, capabilities of air defence and principles of use. 2. Organisational and staff structure and weapons of the reconnaissance company. Combat capabilities and basics of application. 3. Organisational and staff structure and weapons of the CBRN company. Combat capabilities and basics of use.
5.	Group session	2	2	2	<p>Lesson 5. Organisational and staffing structure and capabilities of the engineering support group.</p> <ol style="list-style-type: none"> 1. Organisational and staff structure, weapons and equipment of the GIZ. 2. Combat capabilities and principles of use. ZZR, RZZ, and ZRR as elements of the brigade's combat (marching) order. 3. Organisation of engineering support in the course of combat operations. <p>Independent work</p>

					<p>1. Organisational and staffing structure, weapons and military equipment of a mechanised brigade.</p> <p>2. Fundamentals of the use of combat units of a mechanised brigade.</p> <p>3. Fundamentals of the use of combat support units.</p>
		8	4	4	Topic 2. Control points of a mechanised brigade.
6.	Lecture	2	2	2	<p>Lesson 1: Mechanised brigade headquarters and organisation of work in the headquarters.</p> <p>1. Typical (basic) organisational structure of the headquarters, tasks of its structural units.</p> <p>2. Methods of work of the commander and staff in the preparation and conduct of combat operations.</p> <p>Independent work</p> <p>1. Typical (basic) organisational structure of the headquarters, tasks of its structural units.</p> <p>2. Methods of work of the commander and staff in the preparation and conduct of combat operations.</p>
7.	Group session	2	2	2	<p>Lesson 2: Control points of a mechanised brigade. The procedure for organising work at control points.</p> <p>1. Control points of the mechanised brigade, purpose.</p> <p>2. Distribution of personnel to control points and the order of organisation at control points.</p> <p>Independent work</p> <p>1. Control points of the mechanised brigade, purpose.</p> <p>2. Distribution of personnel to control points and the order of organisation at control points.</p>
		62	28	34	Section 2: Conduct of tactical (stabilisation, specific, special) actions by a mechanised (motorised infantry) brigade
		20	10	10	Topic 3: Fundamentals of preparing and marching with a mechanised (infantry) brigade
8.	Lecture	2	2	4	<p>Lesson 1: The basics of a mechanised brigade's march.</p> <p>1. The main provisions of the brigade's march.</p> <p>2. Organisation of the brigade's march.</p> <p>3. The brigade marches to an area of armed conflict.</p> <p>Independent work</p> <p>1. The main provisions of the brigade's march.</p> <p>2. Organisation of the brigade's march. The work of the commander and staff in organising the march.</p> <p>3. Study of 2 provisions of the Combat Regulations of the Land Forces, Part I.</p>

					4. Preparation of a working map. Development of reference and explanatory tables.
9.	Group exercise	4	4	4	<p style="text-align: center;">Complex tactical task No. 1</p> <p>Lesson 2. The work of the brigade commander and staff in receiving combat orders.</p> <p>1. Receiving the task. 2. Analysis of the task.</p> <p>Independent work</p> <p>1. Study of theoretical provisions of the Combat Regulations of the MTF of the Armed Forces of Ukraine, Part I on march planning. 2. Preparing data for developing action options.</p>
10.	Group exercise	4	4	2	<p>Lesson 3. The work of the commander, staff, chiefs of services and services in planning the march.</p> <p>1. Development of options for building a derivative order. 2. Distribution of forces and means by columns.</p> <p>Independent work</p> <p>1. Study the theoretical provisions of the statute. 2. Add the elements of the selected action option to the working map.</p>
11.		20	8	12	Topic 4. Fundamentals of preparing and conducting defensive combat by a mechanised (motorised infantry) brigade
12.	Lecture	2	2	2	<p>Lesson 1: Fundamentals of defensive combat of a mechanised brigade.</p> <p>1. Fundamentals of defensive combat of a mechanised brigade. 2. Conducting a defensive battle. Features of manoeuvrable defence.</p> <p>Independent work</p> <p>1. Fundamentals of defensive combat of a mechanised brigade. 2. Conducting a defensive battle. Features of manoeuvrable defence.</p>
13.	Group session	2	2	6	<p>Lesson 2: Peculiarities of combat (actions) by air defence units of ground forces in defence and offence.</p> <p>1. General provisions. 2. Conduct of air defence units in defence and offence. 4. Peculiarities of the use of an air defence unit of the SMBde in combat (tactical) operations, taking into account the combat experience of the Russian-Ukrainian war.</p> <p>Independent work</p> <p>1. General provisions. 2. Conduct of air defence units in defence and offence. 4. Peculiarities of the use of an air defence unit of the SMIBde in combat (tactical) operations, taking into account the combat experience of the Russian-Ukrainian war. 5. Fundamentals of defensive combat of a mechanised brigade. 6. Study of the provisions of the Combat Regulations of the MTF of the Armed Forces of</p>

					Ukraine, Part I. 7. Features of the work of the commander and staff in planning a defensive battle.
14.	Group exercise	4	4	4	Complex tactical task No. 2 Lesson 3. The work of the brigade commander and staff in receiving combat orders. 1. Receiving the task. 2. Analysis of the task. Independent work 1. Identify the data required to develop options for action. 2. Study of the provisions of the Combat Regulations of the MTF of the Armed Forces of Ukraine, part I.
15.		22	10	12	Topic 5. Fundamentals of preparing and conducting offensive combat by a mechanised (motorised infantry) brigade
16.	Lecture	2	2	4	Lesson 1: Fundamentals of offensive combat of a mechanised brigade. 1. Fundamentals of offensive combat of a mechanised brigade. 2. Conducting offensive combat. Independent work 1. Fundamentals of offensive combat of a mechanised brigade. 2. Study of the provisions of the Combat Statute of the MTF of the Armed Forces of Ukraine, part I. 3. Peculiarities of the work of the commander and staff in planning an offensive battle
					Complex tactical task No. 3
17.	Group exercise	6	6	8	Lesson 2. The work of the brigade commander and staff with the receipt of a combat order. 1. Receiving the task. 2. Analysis of the task. Independent work 1. Identify the data required to develop options. 2. Study of the provisions of the Combat Regulations of the MTF of the Armed Forces of Ukraine, part I. 3. Preparing for differentiated assessment
	Control measures	2	2		Differentiated credit
	Total for the discipline	90	42	48	

Organisation of technical support

The general objective of the educational programme component:

As a result of studying the discipline, the student should

know:

- the main provisions of the guidelines for organising logistics (technical) support for units and subdivisions;
- the procedure for manning troops with weapons, close combat and reconnaissance equipment, destruction means, and military equipment;
- the procedure for organising the protection, security and defence of a repair unit in combat conditions;
- the procedure for managing a repair unit in combat conditions;
- the military decision-making process in the NATO forces;
- the procedure for organising technical support of a military unit during the preparation and entry of combat (movement of troops);
- the procedure for organising the logistical (technical) support of a military unit (units) during preparation for movement and during the movement in progress;
- the procedure for organising the logistical (technical) support of a military unit (units) during an offensive battle;
- the procedure for organising the logistical (technical) support of a military unit (units) during preparation and during a defensive battle.

be able to:

- develop combat documents on the provision of munitions and artillery support for the military unit and find solutions to provide the relevant material and technical means;
- to use theoretical knowledge of the principles and nature of modern combined arms combat (tactical actions) in the preparation and execution of technical support tasks for units and subunits;
- Understand the task and assess the tactical situation in terms of technical support and reproduce the results of the assessment on a topographic map;
- plan, organise and control the restoration and maintenance of weapons, close combat and reconnaissance equipment;
- organise the protection, security and defence, engineering and camouflage of the area of deployment of the repair unit;
- to organise the activities of military units on weapons and military equipment;
- skills in the use of military units by types, branches of the Armed Forces of Ukraine, other military formations established in accordance with the laws of Ukraine (including NATO standards), organisation of interaction during joint tasks in operations (combat actions);
- make effective decisions on solving complex tasks and problems in the field of management of military units of troops (forces) on weapons and military equipment, in particular, planning, assessment and analysis of the situation and risks;
- organise the provision of munitions to units in various types of combat.

Organisational and methodological guidelines:

The methodology of teaching a discipline is based on the basic principles of didactics (theory of reasoning and learning). It provides a scientific and pedagogical description of the forms and methods of teaching, indicates the most appropriate combinations to achieve a certain level of learning, and determines the conditions for their most effective use.

To achieve the main learning objective, the programme provides for the following forms of learning:

frontal form of training, when all students perform the same task at the same time under the supervision of a teacher;

group form of training, when students are combined into groups (departments) depending on the staffing structure of the unit, which work in parallel;

individual form of training, when students complete tasks sequentially, one by one.

At the same time, depending on the need to achieve the levels of knowledge or skill, the teacher should use the following methods:

verbal and visual;

training;

situational and cognitive.

A verbal and visual method in which the teacher systematically and consistently presents the educational material, shows (demonstrates) the subjects studied in order for students to gain new knowledge and form the appropriate imagination.

The training (reproductive) method consists in performing complex actions in accordance with an algorithm (pre-established procedure) determined by the training leader to develop the necessary skills and ensure the coherence of military organisational structures.

Situational and cognitive - in reviewing and discussing real (probable) actions, learning about the experience of commanding troops (forces) in military conflicts and developing skills in information and analytical activities.

The above methods provide students with knowledge, skills, and abilities, but to develop their creative abilities, the class leader should use problem-based learning methods.

Problem-based teaching is when the class leader poses a problem to the students, solves it himself, but at the same time shows the ways of solving it, reveals the course of his thought. The immediate result of problem-based teaching should be that the student learns the method and logic of solving a particular problem, but not yet the ability to apply it independently. This method teaches students how to search for knowledge and helps them develop creative thinking skills.

The search (heuristic) method serves the purpose of gradually bringing students closer to solving problems on their own by first teaching them how to perform certain elements of the solution. It is used in group exercises when the method of finding the optimal solution is determined by the class leader, but the solution is found by the trainee.

Problem-based methods provide a deep assimilation of knowledge at the level of its creative application, mastery of creative thinking methods, and practical experience.

When conducting lecture classes:

A lecture is the main type of training session designed to teach the theoretical material of a topic.

The main purpose of the lecture is to systematise the foundations of scientific knowledge and practical experience on the topic, the state and prospects of development of management science, theory and practice of military leader's management activities, to focus on the most complex and nodal issues of the educational material. The lecture should be problem-based, stimulate active cognitive activity of students, and promote creative

thinking. In order to enhance the cognitive activity of servicemen and to develop their creative thinking, technical teaching aids should be skilfully used during lectures in combination with active forms and methods of teaching lectures. Classes should be conducted by the method of oral presentation of educational material, with individual questions and educational elements worked out in the form of a dialogue between the teacher and the students and by asking them problematic questions.

When conducting group classes:

A group lesson is a type of training session during which the teacher presents new educational material in a verbal and visual way, controls the students' learning of this material by questioning them and helps to consolidate it.

Group classes are held to enable students to study in detail the issues and problems discussed in lectures and to consider in detail topical issues of the course material. The main teaching methods are explanation with demonstration and discussion. Technical means of information transmission, tables, diagrams, slides, diagrams and posters should be used to ensure visualisation during the classes.

During practical training:

Practical training is a type of training session during which the teacher organises the mastering of the theoretical provisions of the topic through the individual performance of specially designed tasks and promotes the development of skills and abilities to apply these theoretical provisions in practice.

Practical classes should be aimed at consolidating and deepening the knowledge gained by students in lectures and group classes, as well as during independent work, and at developing their skills in solving practical problems in their speciality.

When organising independent work:

Independent work should be carried out with the aim of working out and mastering the educational material; consolidating and deepening knowledge, skills and abilities; preparing for the next classes and control measures; forming a culture of mental work, independence and initiative in the search, acquisition and enrichment of knowledge among students.

Independent work should be provided with educational literature, study guides, assignments and methodological recommendations. All teaching and learning materials should have electronic versions. Methodological materials for independent work should provide for the possibility of self-control.

Logistics:

Classes should be held in specialised classrooms, which should be equipped with personal computers at the rate of one workstation per two students and at the training centre's training ground. It is mandatory to use technical training aids during the training sessions.

Information and methodological support:

1. Law of Ukraine "On Defence of Ukraine".
2. Doctrine of Logistics Force. VKP 4-32(41).01.
3. Doctrine of the Use of Logistics Forces. VKP 4-32(03).01.
4. Joint Logistics Doctrine SP 4-00(30)03.01.
5. Doctrine of Logistics Support of the Land Forces of the Armed Forces of Ukraine VKP 4-00(11.01).
6. Doctrine Provision of material and technical means, works and services VKP 4-179(03).01.
7. Doctrine on the organisation of movements and transportations in the Armed Forces of Ukraine VKP 4-00(03.01).

8. Combat Regulations Logistics of the Land Forces of the Armed Forces of Ukraine (tactical level) BP 4-32(11.01).
9. Combat Regulations Logistics Operations of the Armed Forces of Ukraine (tactical level) BP 4-146(11.01).
10. Combat Regulations of the Operation for the Deployment of Troops (tactical level) BP 4-147(11.01).
11. Guideline on Combat Training of the Logistics Forces of the Armed Forces of Ukraine VKPD 7-00(41.01).
12. Instruction on the Organisation of Tactical (Command and Staff) Exercises in the Armed Forces of Ukraine (Brigade (Regiment), Battalion, Company and their equivalents) VKDP 7-00(174)03.01. Kyiv, State Enterprise of the General Staff.
13. Instruction for the Separate Repair and Restoration Regiment of the VKDP 4-99(55.01)
14. Basic Provisions of Logistics Support of the Armed Forces of Ukraine: approved by the Order of the Ministry of Defence of Ukraine of 11.10.2016 No. 522.
15. Regulations on military transport by rail, sea, river and air: enacted by Order of the Ministry of Defence of Ukraine No. 595 of 05.09.2013.
16. Procedure for the execution of operational (combat) documents: approved by the Order of the General Staff of the Armed Forces of Ukraine of 25.04.2020 No. 140.
17. Analysis of technical support for the actions of units (units) during the anti-terrorist operation. Kyiv: Arming the Armed Forces of Ukraine, 2014.
18. Norms for the accumulation, maintenance and echeloning of fixed stocks of missiles and ammunition in the Armed Forces of Ukraine in peacetime: approved by the Order of the NGSB-GC of the Armed Forces of Ukraine of 15.07.2008.
19. Norms of irrecoverable losses, withdrawal for repair of weapons and equipment, and expenditure of other material resources in the operations of the Armed Forces of Ukraine: approved by the Order of the Chief of Staff of the Armed Forces of Ukraine of 26.01.2016.
20. Military Handbook "Classes of Supply of Logistics to the Armed Forces of NATO Member States" VDV 01.300.001-2016 (01).
21. Collection of combat kits and norms of military stocks of missiles and ammunition in the Armed Forces of Ukraine: approved by the order of the CSR of the Armed Forces of Ukraine of 27.05.2003.
22. Demianchuk B.O., Malyshkin O.V. Fundamentals of technical support. Substantiation of decisions: a textbook. Odesa: VA, 2013. 250 c.
23. Demianchuk B.O., Golovan V.G., Goncharuk A.A., Nikul S.O., Malyshkin O.V. Fundamentals of technical support. Actions of the missile and artillery service: a textbook. Odesa: VA, 2014. 280 c.
24. Planning of logistics support for military units (subdivisions) according to NATO standard operating procedures. Kyiv. NOU.
25. Shumkov I., Rudynskiy V., Pikus D., Bondarenko A. Troop Leadership Procedure (TLP). Study guide Odesa. VA. 97c.
26. The use of technical support units and military units. PART I: Technical support units: a textbook / Ovcharenko I.V. et al. edited by Kopashynskiy S.A. Kyiv: Ivan Cherniakhovskiy National University, 2017. 136 c.
27. The use of technical support units and military units. PART II: Repair and restoration military unit: textbook / Ovcharenko I.V. et al. ed. By Kopashynskiy S.A. Kyiv: Ivan Cherniakhovskiy National University, 2018. 80 c.

Information resources

1. Website of the Military Academy (Odesa). www.vaodessa.org.ua.
2. Electronic library of the Military Academy (Odesa) (internal network). <http://192.168.1.254/>.
3. Electronic library of the Department of Missile and Artillery Armament (internal network of the Military Academy (Odesa)). <http://192.168.1.254/index.php/kafedra-rao>.
4. Website of the Ministry of Defence of Ukraine. <http://www.mil.gov.ua/>.

Titles of topics and distribution of study time by type of study session

№ s/n	Types of training sessions, control measures	Total hours	Among them.		Topic title and study questions
			Training classes	Independent work	
1	2	3	4	5	6
		18	10	8	Topic 1: Organisation of logistical (technical) support of a military unit (units) during preparation and movement.
1.	Lecture	4	2	2	Lesson 1: General provisions of troop transport. 1. Key terms and definitions and general provisions. 2. Organisation and provision of military transport. Independent work 1. Key terms and definitions and general provisions. 2. Organisation and provision of military transport.
2.	Group session	4	2	2	Lesson 2: Fundamentals of military transport organisations. 1. The use of modes of transport for military transport. 2. Planning and management of movements and transportations. Independent work 1. Safety measures during loading (unloading) of railway rolling stock. 2. Safety measures during loading (unloading) on ships. 3. Safety measures during loading (unloading) and rules of conduct for cabin crew on board the aircraft.
3.	Group session	4	2	2	Lesson 3: Organisation of logistics (technical) support for a military unit (units) during preparation for movement and during movement in progress. 1. Logistical support in preparation for the move. 2. Logistical support of the units during the movement. Independent work

					1. Sequence of work of the chief of the unit's armament support service in preparation for movement.
4.	Group session	4	2	2	Lesson 4. Organisation of logistical (technical) support of a military unit (units) during transportation by rail, water and air. 1. Logistics support during rail transport. 2. Features of logistics support by water and air transport. Independent work 1. Order of the National Guard of the Armed Forces of Ukraine dated 11.09.2020 No. 140. 2. Symbols used in logistics documents.
5.	Group session	2	2		Lesson 5. The procedure for calculating the necessary materials for fixing weapons and equipment. 1. Placement of weapons and military equipment on platforms. 2. Materials, devices for placing and securing weapons and equipment.
		42	20	22	Topic 2. Organisation of logistical (technical) support of a military unit (units) during preparation and in the course of a defensive battle.
6.	Lecture	2	2		Lesson 1: Logistics (technical) support of units in preparation for defensive combat. 1. General provisions. 2. Actions of forces and means of technical support in the preparation of a defensive battle.
7.	Group session	6	2	4	Lesson 2. Logistics (technical) support of units in the course of defensive combat. 1. Actions of technical support forces and means in the course of a defensive battle. 2. Features of technical support during the defence of a water barrier. Independent work 1. Peculiarities of organising logistics support for a military unit (units) during a defensive battle in a city. 2. Peculiarities of organising logistics support for a military unit (units) during a defensive battle at night.
8.	Group session	8	2	6	Lesson 3. The work of the armament support services of a military unit in preparation for defence. 1. Sequence of work of the head of the unit's support service in preparation for defence. 2. Developing proposals for the ZZUATZ to be included in the logistics order. Independent work 1. Sequence of work of the chief of support services of the unit in preparation for defence. 2. Introduction to the group exercise. 3. Draw the general situation on the working map.
9.	Group exercise	12	6	6	Lesson 4. Organisation of the provision of munitions and artillery technical support for a military unit in preparation for defence. 1. Awareness of the task. 2. Time calculation.

					<p>3. Assessment of the situation.</p> <p>4. 4. Developing a plan and making a decision.</p> <p>5. Organisation of management and interaction on issues related to ZZUATZ.</p> <p>Independent work</p> <p>1. Developing a plan and making a decision on the ZZUATZ.</p> <p>2. Build up a partial situation on the working map.</p> <p>3. Methodology for calculating the distribution of missiles and ammunition by unit.</p> <p>4. Methodology for calculating the supply of missiles and ammunition to the unit.</p> <p>5. Methodology for calculating the supply of missiles and ammunition to unit units.</p>
10.	Group exercise	12	6	6	<p>Lesson 5. Practice combat documents on the provision of munitions and artillery technical support for a military unit.</p> <p>1. Calculating the provision of weapons to units of the unit.</p> <p>2. Estimation of combat kits and military stocks of missiles and ammunition.</p> <p>3. Calculate the distribution of missiles and ammunition.</p> <p>4. Calculating the supply of missiles and ammunition to the unit.</p> <p>5. Calculating the supply of missiles and ammunition to the unit.</p> <p>6. Preparation of the work card by the head of the support service</p> <p>Independent work</p> <p>1. Complete the build-up on the working map.</p> <p>2. Completion of settlements.</p>
Control measures		2	2		Differential credit
		60	30	30	Topic 3: Organisation of logistical (technical) support of a military unit (units) during an offensive battle.
11.	Group session	2	2		<p>Lesson 1: Logistics (technical) support of units in preparation for offensive combat.</p> <p>1. General provisions.</p> <p>2. Actions of forces and means of technical support in the preparation of offensive combat.</p>
12.	Group session	8	2	6	<p>Lesson 2. Logistics (technical) support of units in the course of offensive combat.</p> <p>1. Content of logistics (technical) support measures for units in an offensive battle.</p> <p>2. Peculiarities of organisation of logistics (technical) support of units in the course of offensive combat on the sea coast.</p> <p>Independent work</p> <p>1. Peculiarities of organisation of logistics (technical) support of units in the course of an offensive battle with the forcing of water obstacles.</p>

					<p>2. Peculiarities of organising logistics (technical) support of units in the course of an offensive battle in the city.</p> <p>3. Peculiarities of organisation of logistics (technical) support of units in the course of offensive combat at night.</p> <p>4. Peculiarities of organisation of logistics (technical) support of units in the course of counterattack.</p>
13.	Group session	6	2	4	<p>Lesson 3. Work of the military unit's armament support services in the preparation and launch of an offensive.</p> <p>1. The sequence of work of the chief of the unit's logistics service in preparation for an offensive.</p> <p>2. Developing proposals for the ZZUATZ to be included in the logistics order.</p> <p>Independent work</p> <p>1. Introduction to the situation in the preparation and entry of the offensive.</p> <p>2. Draw the general situation on the working map.</p>
14.	Group exercise	12	6	6	<p>Lesson 4. Organisation of munitions and artillery support for a military unit in preparation for an offensive.</p> <p>1. Awareness of the task.</p> <p>2. Time calculation.</p> <p>3. Issuance of preliminary orders from the ZZUATZ.</p> <p>4. Assessment of the situation.</p> <p>Independent work</p> <p>1. Developing a plan and making a decision on the ZZUATZ.</p> <p>2. Build up a partial situation on the working map.</p>
15.	Group exercise	12	6	6	<p>Lesson 5. Practice combat documents on the provision of munitions and artillery technical support for a military unit.</p> <p>1. Developing a plan and making a decision on the ZZUATZ.</p> <p>2. Report of the proposal for the organisation of the ZZUATZ.</p> <p>3. Finalise planning and make a decision</p> <p>4. Preparation of the work card by the head of the support service.</p> <p>Independent work</p> <p>1. Complete the build-up on the working map.</p> <p>2. Completion of settlements.</p>
16.	Group exercise	14	6	8	<p>Lesson 6. Practice combat documents on the provision of munitions and artillery technical support for a military unit.</p> <p>1. Issuance of orders from the ZZUATZ to the units of the unit.</p>

				2. Organisation of the management of the ZZUATZ and interaction with other bodies on ZZUATZ issues. 3. Preparation of the work card by the head of the support service. Independent work 1. Complete the build-up on the working map. 2. Completion of settlements.
Control measures	6	6		Examination
Total for the discipline	120	60	60	

Organisation of the work of the head of the support service

The general objective of the educational programme component:

As a result of studying the discipline, the student should

know:

the main provisions of the guidelines for accounting, write-off, categorisation and storage of rocket and artillery weapons during combat operations.

the procedure for accounting and reporting, write-off of material assets of the relevant Missile and Artillery Armament (MAA) nomenclature during combat operations.

the procedure for information exchange (reporting) in the Armed Forces of Ukraine using the specialised LOGFAS software.

the procedure for organising UAV accounting in the logistics information system (LIS) based on the defence resource management system (SAP).

be able to:

to organise high-quality accounting and reporting of material assets of the relevant Missile and Artillery Armament (MAA) nomenclature during combat operations.

to organise high-quality storage and delivery of material assets of the relevant Missile and Artillery Armament (MAA) nomenclature during combat operations.

to organise qualitative categorisation and write-off of material assets of the relevant Missile and Artillery Armament (MAA) nomenclature during combat operations.

organise work with the LOGFAS software

to organise and methodically carry out the procedure for information exchange (reporting) in the Armed Forces of Ukraine using the specialised LOGFAS software.

to organise and methodically correctly account for UAVs in the logistics information system (LIS) based on the defence resource management system (SAP).

Organisational and methodological guidelines:

The methodology of teaching a discipline is based on the basic principles of didactics (theory of reasoning and learning). It provides a scientific and pedagogical description of the forms and methods of teaching, indicates the most appropriate combinations to achieve a certain level of learning, and determines the conditions for their most effective use.

To achieve the main learning objective, the programme provides for the following forms of learning:

frontal form of training, when all students perform the same task at the same time under the supervision of a teacher;

group form of training, when students are combined into groups (departments) depending on the staffing structure of the unit, which work in parallel;

individual form of training, when students complete tasks sequentially, one by one.

At the same time, depending on the need to achieve the levels of knowledge or skill, the teacher should use the following methods:

verbal and visual;

training;

situational and cognitive.

A verbal and visual method in which the teacher systematically and consistently presents the educational material, shows (demonstrates) the subjects studied in order for students to gain new knowledge and form the appropriate imagination.

The training (reproductive) method consists in performing complex actions in accordance with an algorithm (pre-established procedure) determined by the training leader to develop the necessary skills and ensure the coherence of military organisational structures.

Situational and cognitive - in reviewing and discussing real (probable) actions, learning about the experience of commanding troops (forces) in military conflicts and developing skills in information and analytical activities.

The above methods provide students with knowledge, skills, and abilities, but to develop their creative abilities, the class leader should use problem-based learning methods.

Problem-based teaching is when the class leader poses a problem to the students, solves it himself, but at the same time shows the ways of solving it, reveals the course of his thought. The immediate result of problem-based teaching should be that the student learns the method and logic of solving a particular problem, but not yet the ability to apply it independently. This method teaches students how to search for knowledge and helps them develop creative thinking skills.

The search (heuristic) method serves the purpose of gradually bringing students closer to solving problems on their own by first teaching them how to perform certain elements of the solution. It is used during group exercises when the method of finding the optimal solution is determined by the class leader, but the solution is found by the trainee.

Problem-based methods provide a deep assimilation of knowledge at the level of its creative application, mastery of creative thinking methods, and practical experience.

When conducting group classes:

A group lesson is a type of training session during which the teacher presents new educational material in a verbal and visual way, controls the students' learning of this material by questioning them and helps to consolidate it.

Group classes are held to enable students to study in detail the issues and problems discussed in lectures and to consider in detail topical issues of the course material. The main teaching methods are explanation with demonstration and discussion. Technical means of information transmission, tables, diagrams, slides, diagrams and posters should be used to ensure visualisation during the classes.

During practical training:

Practical training is a type of training session during which the teacher organises the mastering of the theoretical provisions of the topic through the individual performance of specially designed tasks and promotes the development of skills and abilities to apply these theoretical provisions in practice.

Practical exercises should be aimed at consolidating and deepening the knowledge gained by students in group classes and during independent work, and at developing their skills in solving practical problems of everyday military activities.

Logistics:

Classes should be held in specialised classrooms, which should be equipped with personal electronic computing equipment and the training ground of the educational process support centre. It is mandatory to use technical training aids during the training sessions.

Information and methodological support:

1. "The Regulation on the Military (Ship) Economy of the Armed Forces of Ukraine was approved by the Order of the Minister of Defence of Ukraine of 16.07.1997 No. 300.

2. "Instructions on Categorisation of Rocket and Artillery Weapons" approved by the Order of the Minister of Defence of Ukraine of 04.01.2019 No. 4.

3. "Instructions on the organisation of repair of rocket and artillery weapons in peacetime" approved by the Order of the Ministry of Defence of Ukraine of 16.08.2012 No. 545.

4. The "Instructions on Accounting for Military Property in the Armed Forces of Ukraine" were introduced by the Order of the Minister of Defence of Ukraine of 17.08.17 No. 440.

5. "Instruction on the Organisation of Accounting, Storage and Issuance of Small Arms and Ammunition in the Armed Forces of Ukraine" approved by the Order of the Minister of Defence of Ukraine of 29.06.2005 No. 359, as amended on 30 December 2021 No. 404.

6. "Instructions on the specifics of conducting an inventory of small arms, missiles and ammunition in the Armed Forces of Ukraine" was enacted by the Order of the Minister of Defence of Ukraine of 10.01.2017 No. 16.

7. "Methodology for determining the residual value of property of the Armed Forces of Ukraine and other military formations" was enacted by the Resolution of the Cabinet of Ministers of Ukraine of 29.05.1998 No. 759.

8. "The Procedure for Write-Off of Military Property in the Armed Forces of Ukraine and the State Special Transport Service was enacted by the Order of the Minister of Defence of Ukraine No. 81 of 29.03.2021.

9. Law of Ukraine "On the Statute of the Internal Service of the Armed Forces of Ukraine" was enacted on 24.03.1999, No. 548-XIV.

10. Law of Ukraine "On the Legal Regime of Property in the Armed Forces of Ukraine" was enacted on 21.09.1999, No. 1075-XIV.

11. Golovan A.V., Golovan V.G., Nikul S.O., Malyshkin O.V., Svyatokum K.V. Fundamentals of the theory of reliability and operation of regional distribution system. Study guide - Odesa: VA, 2019. 270 c.

Information resources

1. Website of the Military Academy (Odesa). www.vaodessa.org.ua.
2. Electronic library of the Military Academy (Odesa) (internal network). <http://192.168.1.254/>.
3. Electronic library of the Department of Missile and Artillery Armament (internal network of the Military Academy (Odesa)). <http://192.168.1.254/index.php/kafedra-rao>.
4. Website of the Ministry of Defence of Ukraine. <http://www.mil.gov.ua/>.

Titles of topics and distribution of study time by type of class

№ s/n	Types of training sessions, control measures	Total hours	Among them.		Topic, purpose and objectives of the training session, study questions
			Training classes	Independent work	
1	2	3	4	5	6
					Section 1. Organisation of accounting, categorisation and write-off of military property Missile and Artillery Armament (MAA) in a military unit.
		15	6	9	Topic 1: Organisation of military property accounting in a military unit.
1.	Lecture	5	2	3	<p>Lesson 1: Mission and structure of the missile and artillery service.</p> <p>1.The purpose and objectives of the discipline, its role and place in the system of training a specialist in missile and artillery weapons.</p> <p>2.Organisational and staffing structure of the brigade support service, job responsibilities of the service personnel.</p> <p>3.The main guiding documents regulating the activities of the service for organising accounting, categorisation, write-off and storage.</p> <p>Independent work</p> <p>1. General Provisions of the Instruction on Accounting for Military Property in the Armed Forces of Ukraine (Order of the Ministry of Defence of Ukraine of 17.08.2017 No. 400).</p> <p>2. Peculiarities of accounting for military property in military units engaged in combat operations.</p>
2.	Group session	5	2	3	<p>Lesson 2. General provisions on the organisation of accounting for weapons and munitions in a military unit.</p> <p>1. General provisions on the organisation of accounting in a military unit.</p> <p>2. Types of accounting documents kept by the security service.</p> <p>Independent work</p> <p>General Provisions of the Instruction on Accounting for Military Property in the Armed Forces of Ukraine (Order of the Minister of Defence of Ukraine of 17.08.2017 No. 400)</p> <p>1. Auxiliary accounting documents.</p>

3.	Group Session	5	2	3	<p>Lesson 3: Organisation of accounting for weapons and munitions in a military unit.</p> <ol style="list-style-type: none"> 1. Organisation of accounting in the military unit's support service. 2. Organisation of accounting in the warehouse of a military unit. 3. Organisation of accounting in the units of the military unit. <p>Independent work</p> <ol style="list-style-type: none"> 1. Regulations on the organisation of military property accounting in the Armed Forces of Ukraine. 2. Peculiarities of accounting for missile and rocket-artillery weapons, equipment and property. section 15 of the order of the Minister of Defence of Ukraine of 17.08.17 No. 440.
4.	Practical session	5	2	3	<p>Lesson 4. Maintaining accounting documents for radioactive waste in the military unit support service.</p> <ol style="list-style-type: none"> 1. Maintain primary accounting documents for radioactive waste in the military unit's radioactive waste service. 2. Maintaining accounting registers (books and accounting cards) for radioactive waste accounting in the military unit's radioactive waste service. <p>Independent work</p> <p>Regulations on the organisation of military property accounting using automation tools.</p> <ol style="list-style-type: none"> 1. Organisation of military property accounting with the use of automation means. Section 7 of the Order of the Minister of Defence of Ukraine of 17.08.17 No. 440.
		27	12	15	Topic 2. Organisation of military property accounting during combat operations, participation in anti-terrorist operations, international peacekeeping and security operations.
5.	Group session	5	2	3	<p>Lesson 1: Accounting for military property in military units engaged in combat operations.</p> <ol style="list-style-type: none"> 1. Procedure and peculiarities of accounting for military property in military units engaged in combat operations 2. Peculiarities of accounting for military property at military warehouses of troops (forces) engaged in combat operations. <p>Independent work</p> <ol style="list-style-type: none"> 1. Peculiarities of accounting for military property in the support services of military command and control bodies of troops (forces) engaged in combat operations.
6.	Group session	5	2	3	<p>Lesson 2: Peculiarities of accounting for small arms and ammunition in military units during combat operations.</p> <ol style="list-style-type: none"> 1. Procedure for echeloning and accumulation of missiles and ammunition stocks to the established norms during combat operations. 2. Organising the accounting of small arms and ammunition in the brigade at battalion and company strongholds during combat operations.

					Independent work 1. Peculiarities of storage of small arms, ammunition and hand grenades during combat operations, anti-terrorist operation and Joint Forces Operation Order of the Ministry of Defence of Ukraine of 29 June 2005, No. 359, as amended on 30 December 2021, No. 404.
7.	Group session	2	2		Lesson 3: Procedure for keeping records of missiles and ammunition in military units during combat operations. 1. Procedure for keeping records of missiles and ammunition at battalion ammunition points. 2. Procedure for keeping records of missiles and ammunition at company and platoon support points (ammunition points).
8.	Practical session	5	2	3	Lesson 4. Keeping records of missiles and ammunition in units of a military unit during combat operations. 1. Maintain primary documents for the issue of missiles and ammunition at battalion ammunition points. 2. Maintaining records for the issue of missiles and ammunition at company support points (ammunition points). Independent work 1. Maintaining primary documents for the issue of missiles and ammunition at battalion ammunition points. 2. Maintaining records for the issue of missiles and ammunition at company and platoon support points (ammunition points).
9.	Group session	5	2	3	Lesson 5. Peculiarities of accounting for trophy military property collected on the battlefield. 1. Peculiarities of accounting for trophy property collected in the areas of hostilities, 2. Peculiarities of accounting for property received as international aid, from volunteer organisations, as charitable and humanitarian aid. Independent work 1. Peculiarities of accounting for property collected on the battlefield and received with the wounded (sick) to the medical units of the military unit.
		18	12	6	Topic 3: Organisation of categorisation of military property.
10.	Group session	5	2	3	Lesson 1: Categorisation of missile and artillery weapons. 1. Basic provisions for the categorisation of missile and artillery weapons. 2. Categorisation of artillery weapons. Categorisation of artillery barrels. Independent work 1. General Provisions of the Instruction on the Procedure for Categorisation of Missile and Artillery Weapons

					Order of the Minister of Defence of Ukraine of 04.01.2019 No. 4.
11.	Group session	2	2		Lesson 2: Categorisation of ammunition, missiles and spare parts. 1. The procedure for categorising ammunition 2. The procedure for categorising missiles and spare parts
12.	Practical session	4	4		Lesson 3: Transfer of weapons from one category to another. 1. Transfer of numbered artillery weapons from one category to another. 2. Transfer of military-technical property of the GRAU nomenclature from one category to another
13.	Practical session	5	2	3	Lesson 4. Transfer of missiles and ammunition from one category to another. 1. Transfer of missiles from one category to another. 2. Transfer of ammunition from one category to another. Independent work Preparation for differential assessment.
14.	Control measures	2	2		Differentiated credit
			10	15	Topic 4. Organisation of military property write-off.
15.	Group session	5	2	3	Lesson 1: Organisation of write-offs of material assets in the Armed Forces of Ukraine. 1. General Regulations on the organisation of write-offs from the accounting of material assets in the Armed Forces of Ukraine. 2. Organisation of write-offs of material assets in the Armed Forces of Ukraine. Independent work 1. General Regulations on the Procedure for Writing Off Material and Cash Assets from the Records of the Armed Forces of Ukraine (Order of the Ministry of Defence of Ukraine No. 81 of 29.03.2021).
16.	Group session	5	2	3	Lesson 2: Organisation of write-offs from the accounting of material assets on the basis of an inspector's certificate. 1. General requirements for the procedure for writing off material assets from the accounting of material assets under the inspection certificate. 2. The general algorithm for writing off military property on the basis of an inspector's certificate. 3. Documents required to obtain an inspector's certificate.

					Independent work 1. General Regulations on the Procedure for Writing Off Material and Cash Assets from the Records of the Armed Forces of Ukraine (Order of the Ministry of Defence of Ukraine No. 81 of 29.03.2021).
17.	Group session	5	2	3	Lesson 3: Procedure for writing off material assets from the accounting records on the basis of an inspector's certificate. 1. Procedure for officials to act when writing off material assets under an inspector's certificate. 2. The procedure for conducting an internal investigation. Independent work 1. Legislative and regulatory framework governing the procedure for writing off military property on the basis of an inspector's certificate.
18.	Group session	5	2	3	Lesson 4. Write-off of material assets from the accounting of material assets on the basis of an inspector's certificate. 1. Procedure for drafting an order of the commander of a military unit on the results of the investigation. 2. Preparation of materials for obtaining an inspector's certificate and further actions. 3. Submission of documents for approval of the inspector's certificate. Independent work 1. Write-off of material and cash assets. 2. Preparation and execution of write-off documents.
19.	Practical session	2	2	3	Lesson 5. Registration of write-offs from the accounting of material assets on the basis of an inspector's certificate. 1. Filing an application for an inspector's certificate. 2. Issuance and approval of an inspector's certificate. Independent work 1. Legislative and regulatory framework governing the procedure for writing off military property on the basis of an inspector's certificate.
		9	6	3	Topic 5. Organisation of write-off of military property during hostilities.
20.	Group session	2	2		Lesson 1: Organisation of write-off of expended military property under the legal regime of martial law. 1. General Provisions on the Procedure for Writing Off Material and Cash Assets from the Records of the Armed Forces of Ukraine under the Legal Regime of Martial Law. 2. Procedure for writing off all types of missiles expended in the course of military (combat) operations. 3. Procedure for writing off munitions used in the course of military (combat) operations. Independent work 1. General Provisions on the Procedure for Writing Off Material and Cash Assets from the Records of the

					Armed Forces of Ukraine under the Legal Regime of Martial Law.
21.	Group session	5	2	3	Lesson 2: Organisation of writing off lost military property during combat operations. 1. The procedure for writing off spent cartridge cases for artillery and small arms ammunition lost in the course of military (combat) operations. 2. Procedure for writing off special containers of all types of missiles (shots) lost in the course of military (combat) operations.
22.	Practical session	5	2	3	Lesson 3: Write-off of military property under the legal regime of martial law. 1. Decommissioning of all types of missiles during combat operations. 2. Write-off of munitions consumed during hostilities. 3. Write-off of spent shell casings for artillery and small arms ammunition, special containers of all types of missiles (shots) lost during hostilities. Independent work Preparation for differential assessment.
		26	14	12	Topic 6: Keeping records of UAVs in the logistics information system (LIS) based on the defence resource management system (SAP).
23.	Lecture	5	2	3	Lesson 1: Software tools for accounting for material and technical assistance of NATO partner countries to Ukraine. 1. The main processes of data exchange on logistical assistance from NATO partner countries to Ukraine. 2. Specialised LOGFAS software: purpose, capabilities and tasks to be solved. 3. Procedure for information exchange (reporting) in the Armed Forces of Ukraine using the specialised software LOGFAS. Independent work 1. Definition of logistics according to NATO standards, key guidance documents. 2. The NATO logistics doctrine, planning and management concepts.
24.	Lecture	5	2	3	Lesson 2: Overview of the specialised software LOGFAS. 1. Create, edit and delete databases (LOGFAS Connection Manager (LCM) module). 2. Work with geographic data (Geographical Manager (GEOMAN) module). 2. Working with non-geographic data (LOGFAS DATA MANAGER (LDM) module). Independent work 1. Purpose, tasks to be solved, set of tools. 2. The structure of accounting for material and technical assistance in the Armed Forces of Ukraine.
25.	Group session	5	2	3	Lesson 3: Organisation and types of property receipts in a military unit. 1. UAV accounting system based on SAP.

					<ul style="list-style-type: none"> 2. Remote learning portal 3. Reference book of materials in the system 4. Receipt of property by order 5. Receipt of property without an order. 6. Report "List of material documents" <p>Independent work</p> <ul style="list-style-type: none"> 1. Study the general information about the course.
26.	Practical session	7	4	3	<p>Lesson 4. Registration of property in a military unit.</p> <ul style="list-style-type: none"> 1. Receipt of property by orders. 2. Receipt of property without an order. 3. Movement of property between warehouses (movement type 311, 201, YC1) 4. Formation and release of property <p>Independent work</p> <p>Preparing for the exam.</p>
Control measures		4	4		Examination
Total for the discipline		120	60	60	

Military leadership

General purpose of the discipline (subject of study)

The purpose of teaching the discipline "Military Leadership: Leader's Influence on the Team" is to teach students the techniques of leadership communication, formation of culture and moral and psychological climate, organisation of interaction, problem solving, implementation of changes, prevention and counteraction to destructive behaviour and the effects of combat stress in order to maintain a combat-ready team to ensure the performance of tasks during service as tactical officers.

As a result of studying the discipline, the student should

know:

- principles and essence of team leadership;
- experience (mistakes and best practices) in supporting combat-ready teams;
- communication techniques and the leader's influence on the team;
- principles of organising teamwork;
- techniques for problem solving and implementing changes in the team;
- factors, mechanisms of action and manifestations of combat stress;
- techniques to support and restore the team's combat capability;
- manifestations of deviant and/or toxic behaviour and actions of the leader in order to prevent, control and neutralise them.

be able to:

- Analyse, synthesise and adapt to the needs of the team the experience of the team(s) in combat operations;
- to create and maintain the moral and psychological climate and culture in the team necessary for the performance of tasks;
- organise interaction between team leaders and team members;
- make non-standard decisions to ensure the completion of the task and prevent/minimise losses in the team;
- provide command and combat information;
- plan and implement changes in the team;
- control the impact and manifestations of combat stress, support and restore the team during combat operations and after leaving the mission area;
- prevent and counteract disruptive behaviour by team members and others who may have an impact on the team.

Organisational and methodological guidelines

The discipline is designed to develop the level of knowledge and skills necessary for the students to realise the goals, mission, values of a military leader and further development and self-improvement on the path of military leadership.

It is mandatory to systematically consolidate the knowledge and skills acquired in the course of studying the discipline during practical, group classes and independent work.

The educational material provided for studying during independent work is processed in accordance with the specified time and is submitted for current and final control together with the educational material that is processed in class under the guidance of a scientific and pedagogical employee.

Active learning methods, individual, group and frontal methods of knowledge control are used in all forms of classes.

Frequency and peculiarities of current control, general procedure for determining the score for current control

An integral part of the professional military education courses for officers of the Armed Forces of Ukraine is the system of control and reporting on the quality of learning. The main purpose of the control is to ensure the scientific level of the acquired knowledge and the strength of the skills and abilities developed.

The following control methods are used in teaching the discipline:

entrance control;

current control;

self-control;

final control.

The number of control measures, forms of their implementation, and frequency are communicated to students at the beginning of the discipline.

Entrance control is carried out before the study of the discipline in order to study the level of training of course participants and make changes to the content of the educational issues to be considered during the class.

Current control is carried out by teachers at all types of classes in the form of oral questioning, written express control during classes, including electronic questionnaires in various forms by decision of the academic staff (instructor) - the head of the classes.

The main purpose of the current control is to provide feedback between teachers and students in the learning process. It checks the students' readiness to complete the next learning tasks and ensures the management of their learning motivation. The information obtained during the current control is used to adjust the methods and means of teaching, as well as for students' independent work.

The results of the current control are recorded in the training logbook and are used and taken into account during the final control.

Self-control is intended for students' self-assessment of the quality of learning material on a specific topic of the discipline. Self-control is carried out in the form of control questions on the topic or testing on a computer.

The final control is carried out in the form of a differentiated test in the amount of educational material determined by the programme of the discipline.

When studying a discipline in the distance learning mode, students are assessed for the discipline as a whole based on the performance of a test, the assessment of which affects the further direct training of students in courses at a higher military educational institution.

When taking courses directly at a higher military educational institution, students who have completed the full course of study provided by this programme are allowed to take differentiated tests.

To conduct differentiated assessments, an examination board is appointed by order of the Commandant of the Academy, which includes academic staff of the Military Academy who have taught this discipline.

Logistical support

During the training sessions, the following teaching aids should be used: classrooms, the Internet (or local network), computer classes, multimedia equipment, visual aids, writing materials, distance learning platforms, electronic manuals, questionnaires and personal gadgets (smartphones, tablets, laptops, etc.) by the decision of the academic staff member - the head of the classes.

Information and methodological support

1. The Doctrine of Military Leadership in the Armed Forces of Ukraine, approved by the Chief of the General Staff of the Armed Forces of Ukraine on 22.01.2024, No. 369.
2. Strategy for the Development of Military Leadership in the Armed Forces of Ukraine: approved by the Commander-in-Chief of the Armed Forces of Ukraine on 17.11.23. The Commander-in-Chief of the Armed Forces of Ukraine of 17.11.2023 No. 325.
3. Doctrine on the Study and Implementation of Military Experience in the Armed Forces of Ukraine. VKP 7-00(01).01: approved by the NGS of the Armed Forces of Ukraine on 30. NGS of the Armed Forces of Ukraine of 30.06.2020.
4. On Approval of the Instruction on Assessment of the Level of Authority and Leadership of Commanders (Chiefs) in the Armed Forces of Ukraine: Order of the General Staff of the Armed Forces of Ukraine of 05.07.2018. №249.

Joint Military Sources (NATO)

5. Military leadership: competence, confidence, flexibility. Guideline FM 6-22 (FM 22-100). Kyiv: KNT, 2023. 280 c.
6. Army Leadership and The Profession ADP 6-22, July, 2019.
7. Army Team Building. ATP 6-22.6, 2015.
8. Building Cohesive and Adaptive Teams Small Unit Leader Training Aid.
9. Building Cohesive Teams. US Army Combined Arms Centre .
10. Leader Development. FM 6-22, November, 2022.
11. Mission and Command. Command and Control of Armed Forces. ADP 6-0, July ., 2019

Books

12. Boyko O.V. Theory and methodology of formation of leadership competence of officers of the Armed Forces of Ukraine: monograph / O.V. Boyko. Zhytomyr: O.O. Yevenok Publishing House, 2020. 667 c.
13. Bryce G. Red Team / translated from English by Uliana Kurganova. Kharkiv: Fabula, 2020. 256 c.
14. Big Explanatory Dictionary of the Modern Ukrainian Language: 250000 / compiled and edited by V. T. Busel. Kyiv; Irpin: Perun, 2005. VIII, 1728 p.
15. Willink D., Bebin L. Absolute responsibility. Leadership lessons from Navy SEALs. Kyiv: Knigolav, 2020. 400 c.
16. Willink D. Strategy and Tactics of Leadership / translated from English by L. Pylaeva. Kyiv: Book Chef, 2021. 368 c.
17. Zelinsky A. Anatomy of a Warrior: Spirit, Way, Power. Kyiv: Circle of Life, 2023. 215 c.
18. McChrystal, S., Collins, T., Silverman, D., Fassell, K. Team of Teams. New rules of interaction in a complex world / translated from English by A. Zhyshchynska. Dnipro: Monolith, 2018. 384 c.

Information resources

19. Zelinsky A. Every victory is a team achievement. TEDxUCU.

20. Joko Willink Retired U.S. Navy SEAL. Podcaster. Author Leadership. Instructor. Entrepreneur <https://jocko.com/>
21. McChrystal S. Listen, learn ... then lead. TED
22. Military leadership. YouTube.
23. Military television of Ukraine. I am a warrior!
24. Ukrainian Centre for Military Leadership distance learning platform.
25. Dictionary of foreign language words.
26. The feature film The Miracle (USA, 2004).
27. The feature film Rage (USA, 2014).
28. The feature film Against the Sun (USA, 2014).
29. The feature film Strike Force (USA, 2019).
30. Feature film The Survivor (USA, 2013).
31. Feature film Outpost (Bulgaria, USA, 2020).

Types, topics and learning questions

№ s/n	Types of training sessions, control measures	Total hours	Among them.		Topic, purpose and objectives of the training session, study questions
			Training classes	Independent work	
1	2	3	4	5	6
		12	6	6	Topic 1: Leadership experience in combat-ready teams.
1.	Group session	4	2	2	Lesson 1: Experience of combat-ready teams. 1. Positive and negative experiences of combat-ready teams and their leaders. 2. Conclusions and lessons learnt. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
2.	Group session	4	2	2	Lesson 2: Study and learn the lessons of implementing the experience of combat-ready teams. 1. Learning the lessons of implementing the experience of combat-ready teams. 2. Learning the lessons of implementing the experience of combat-ready teams. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
3.	Practical session	4	2	2	Lesson 3: Tools for systematising experience. 1. Reporting on the lessons learnt and lessons learned from the implementation of the experience of combat-ready teams. 2. Reporting automation tools implement the experience of combat-ready teams. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
		12	6	6	Topic 2. Formation of a moral and psychological climate in a combat-ready team.
4.	Practical session	4	2	2	Lesson 1: Techniques of leader's influence on a combat-ready team. 1. Techniques of direct (personal) influence of the military leader on the personnel. 2. Techniques of organisational interaction between a military leader and a combat-ready team. Independent work

					1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
5.	Group session	4	2	2	Lesson 2: Prevention of addictive and deviant behaviour in a combat team by a military leader. 1. Algorithms (procedures) for the prevention of alcoholism and drug addiction. 2. Counteracting deviant behaviour. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
6.	Group session	4	2	2	Lesson 3: Military leader's counteraction to toxic behaviour in a combat-ready team. 1. Character traits and manifestations of toxic behaviour in military personnel. 2. Counteracting manifestations of toxic behaviour in the military. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
		10	4	6	Topic 3. Military leader's support of a combat-ready team.
7.	Group session	5	2	3	Lesson 1: Actions of a military leader to support a combat-ready team. 1. Actions of a military leader in preparation for use (performing assigned tasks). 2. The use of positive role models by the military leader to support the team's combat capability. 3. Key issues of maintaining a combat-ready team by a military leader (assessment of the level of team development). Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
8.	Group session	5	2	3	Lesson 2: Supporting a combat-ready team by a military leader in combat conditions. 1. Factors that affect the cohesion and activity of a combat team at the "Support" stage of a combat team. 2. Actions of a military leader during combat missions (cases "Abandonment of positions" / "Change of leader"). 3. Actions of personnel and changes in activities in combat conditions at the "Support" stage of a combat team. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
		12	6	6	Topic 4. Team leadership in a military unit.
9.	Group session	4	2	2	Lesson 1: Problems of team leadership in a military unit. 1. Principles and essence of command leadership in a military unit. 2. Factors and problematic issues of command leadership in a military unit. Independent work 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.

10.	Group session	4	2	2	<p>Lesson 2: Organising the interaction of military leaders in the chain of command.</p> <ol style="list-style-type: none"> 1. The essence of interaction between military leaders in the chain of command: maintaining a balance of subordination and unity of command. 2. Techniques of interaction between "junior" military leaders and "senior" ones. <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
11.	Group session	4	2	2	<p>Lesson 3: Interaction between military leaders of combat-ready teams.</p> <ol style="list-style-type: none"> 1. The essence of military leaders' relations in "horizontal" interaction. 2. Techniques of "horizontal" interaction between military leaders based on combat experience. 3. Organising interaction between combat-ready "teams of teams". <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
		12	6	6	Topic 5. Formation of a corporate culture in a combat-ready team by a military leader.
12.	Practical session	4	2	2	<p>Lesson 1: Internal communications of a military leader.</p> <ol style="list-style-type: none"> 1. The Commander's Information methodology (meeting the information needs of the personnel by the military leader). 2. The Combat Information methodology (interpretation of the BN/BR, taking into account the information needs of personnel). 3. Delivery of a motivational speech by a military leader on a relevant topic. <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
13.	Practical session	4	2	2	<p>Lesson 2. External communications of a military leader.</p> <ol style="list-style-type: none"> 1. Interaction of the military leader with the media (briefing, interviews, messages). 2. Principles and essence of interaction between a military leader and a chaplain. 3. Solving problematic issues of interaction between a military leader and chaplains. <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
14.	Group session	4	2	2	<p>Lesson 3: Gender, ethnicity and cross-cultural aspects in a combat-ready team.</p> <ol style="list-style-type: none"> 1. Gender aspects in a combat-ready team. 2. Ethnic aspects of teamwork in a military unit. 3. Cross-cultural aspects of teamwork in a military unit. <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
		14	6	8	Topic 6: Implementation of changes in a combat team by a military leader.

15.	Group session	4	2	2	<p>Lesson 1: Initiating change in a combat team.</p> <ol style="list-style-type: none"> 1. The meaning of changes in a combat-ready team. 2. The essence of change initiatives in a combat-ready team: why, when and how to implement them. 3. Brainstorming: "What changes are appropriate in the tactical and operational levels of command?" <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
16.	Group session	6	2	4	<p>Lesson 2: Techniques for a military leader to implement changes in a combat team.</p> <ol style="list-style-type: none"> 1. Technique: "How to succeed as a newly appointed military leader". 2. Iterative decision-making technique. 3. The Decentralised Command technique. 4. Technique: "Using leadership capabilities to train, develop and maintain a capable team". 5. Eliminate the negative approach technique. 6. Teaching modesty technique. 7. Technique "Building and restoring leaders' self-confidence". 8. Technique "Training high-level team players". <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
17.	Group session	4	2	2	<p>Lesson 3: Red Team military leadership techniques for achieving productive change.</p> <ol style="list-style-type: none"> 1. The non-standard thinking of the "Red Teams" in generating changes in the unit (the essence and psychology of the "Red Teams"). 2. Techniques for solving the unit's problems with "Red Teams", imaginative techniques. 3. Analytical methods of applied critical thinking in "Red Teams". 4. Rules of operation of the Red Teams. <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
		16	8	8	Topic 7. Military leader's control of combat and operational stress in a combat-ready team.
18.	Group session	4	2	2	<p>Lesson 1: Factors of combat stress and the consequences of its impact on the combat effectiveness of the team.</p> <ol style="list-style-type: none"> 1. Combat stress, factors of its occurrence (combat stressors). 2. Brainstorming session: "Signs and consequences of combat stress on the combat capability of a team" (based on combat experience). <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.

19.	Practical session	4	2	2	<p>Lesson 2: Formation of stress resistance of a combat-ready team by a military leader.</p> <ol style="list-style-type: none"> 1. Creation of a matrix (table) for modelling combat situation factors in the process of preparing for combat missions (based on standards and norms of combat training). 2. Techniques of forming stress resistance of individual servicemen and the team as a whole by a military leader. <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
20.	Practical session	4	2	2	<p>Lesson 5. Control of combat and operational stress by a military leader in a combat-ready team.</p> <ol style="list-style-type: none"> 1. Experience of military leaders in controlling combat and operational stress. 2. An algorithm for controlling combat and operational stress by a military leader in the process of performing assigned tasks (based on cases of combat situations). <p>Independent work</p> <ol style="list-style-type: none"> 1. Watching video cases (based on interviews with military leaders) and reading books on the topic.
21.	Group session	4	2	2	<p>Lesson 7. Restoration of the team's combat capability by a military leader after exposure to combat stressors.</p> <ol style="list-style-type: none"> 1. The experience of military leaders in recovering from combat stressors. 2. An algorithm for a military leader to restore a team after exposure to combat stressors (on the example of restoring combat capability). <p>Independent work</p> <ol style="list-style-type: none"> 1. Preparing for differentiated testing.
Control measures		2	2		Differentiated credit
In total for discipline		90	44	46	

Management of the operation of munitions

The general objective of the educational programme component:

As a result of studying the discipline, the student should

know:

safety measures and the procedure for training in the safety rules at the ABS when working with missiles and ammunition;

Order:

receiving and dispatching missiles and ammunition at the launch site;

storage of missiles and ammunition at the battery storage facility;

repair of ammunition in the army and at the ammunition storage facilities;

organisation of accounting on the ABS;

the structure and design of naval artillery weapons, naval missile weapons, mine and anti-mine weapons, as well as torpedo and anti-submarine weapons, bombardment weapons, aircraft artillery weapons, unguided aircraft weapons and guided aircraft missiles;

the purpose of weapons and ammunition systems of the Ukrainian Navy and Air Force.

be able to:

organise the receipt and dispatch of missiles and ammunition to the ABS;

arrange for the storage of missiles and ammunition at the battery storage facility;

organise monitoring of the technical condition of missiles and ammunition on the ABS;

organise accounting on the ABS;

organise the repair of ammunition in the army and at the ammunition storage facilities;

to organise and personally carry out activities for the operation of aviation and naval means of destruction;

use the acquired theoretical knowledge and practical skills in the organisation of the operation of aviation and naval weapons;

Organisational and methodological guidelines:

The methodology of teaching a discipline is based on the basic principles of didactics (theory of reasoning and learning). It provides a scientific and pedagogical description of the forms and methods of teaching, indicates the most appropriate combinations to achieve a certain level of learning, and determines the conditions for their most effective use.

To achieve the main learning objective, the programme provides for the following forms of learning:

Frontal learning, when all students perform the same task at the same time under the supervision of a teacher;

group form of training, when students are combined into groups (departments) depending on the staffing structure of the unit, which work in parallel;

individual form of training, when students complete tasks sequentially, one by one.

At the same time, depending on the need to achieve the levels of knowledge or skill, the teacher should use the following methods:

verbal and visual;

training;
situational and cognitive.

A verbal and visual method in which the teacher systematically and consistently presents the educational material, shows (demonstrates) the subjects studied in order for students to gain new knowledge and form the appropriate imagination.

The training (reproductive) method consists in performing complex actions in accordance with an algorithm (pre-established procedure) determined by the training leader to develop the necessary skills and ensure the coherence of military organisational structures.

Situational and cognitive - in reviewing and discussing real (probable) actions, learning about the experience of commanding troops (forces) in military conflicts and developing skills in information and analytical activities.

The above methods provide students with knowledge, skills, and abilities, but to develop their creative abilities, the class leader should use problem-based learning methods.

Problem-based teaching is when the class leader poses a problem to the students, solves it himself, but at the same time shows the ways of solving it, reveals the course of his thought. The immediate result of problem-based teaching should be that the student learns the method and logic of solving a particular problem, but not yet the ability to apply it independently. This method teaches students how to search for knowledge and helps them develop creative thinking skills.

The search (heuristic) method serves the purpose of gradually bringing students closer to solving problems on their own by first teaching them how to perform certain elements of the solution. It is used during group exercises when the method of finding the optimal solution is determined by the class leader, but the solution is found by the trainee.

Problem-based methods provide a deep assimilation of knowledge at the level of its creative application, mastery of creative thinking methods, and practical experience.

During lecture classes:

A lecture is the main type of training session designed to teach the theoretical material of a topic.

The main purpose of the lecture is to systematise the foundations of scientific knowledge and practical experience on the topic, the state and prospects of development of management science, theory and practice of military leader's management activities, to focus on the most complex and nodal issues of the educational material. The lecture should be problem-based, stimulate active cognitive activity of students, and promote creative thinking. In order to enhance the cognitive activity of servicemen and to develop their creative thinking, technical teaching aids should be skilfully used during lectures in combination with active forms and methods of lecturing. Classes should be conducted by the method of oral presentation of educational material, with individual questions and educational elements worked out in the form of a dialogue between the teacher and the students and by asking them problematic questions.

During group classes:

A group lesson is a type of training session during which the teacher presents new educational material in a verbal and visual way, controls the students' learning of this material by questioning them and helps to consolidate it.

Group classes are held to enable students to study in detail the issues and problems discussed in lectures and to consider in detail topical issues of the course material. The main teaching methods are explanation with demonstration and discussion. Technical means of information transmission, tables, diagrams, slides, diagrams and posters should be used to ensure visualisation during the classes.

During practical training:

Practical training is a type of training session during which the teacher organises the mastering of the theoretical provisions of the topic through the individual performance of specially designed tasks and promotes the development of skills and abilities to apply these theoretical provisions in practice.

Practical classes should be aimed at consolidating and deepening the knowledge gained by students in lectures and group classes, as well as during independent work, and at developing their skills in solving practical problems in their speciality.

During the organisation of independent work:

Independent work should be carried out with the aim of working out and mastering the educational material; consolidating and deepening knowledge, skills and abilities; preparing for the next classes and control measures; forming a culture of mental work, independence and initiative in the search, acquisition and enrichment of knowledge among students.

Independent work should be provided with educational literature, study guides, assignments and methodological recommendations. All teaching and learning materials should have electronic versions. Methodological materials for independent work should provide for the possibility of self-control.

Logistics:

Classes should be held in specialised classrooms, which should be equipped with samples of rocket and artillery weapons. It is mandatory to use technical means of training during training sessions.

Information and methodological support:

1. Law of Ukraine "On Defence of Ukraine".
2. The "Instruction on the Organisation of Accounting, Storage and Issuance of Small Arms and Ammunition in the Armed Forces of Ukraine" was approved by Order of the Minister of Defence of Ukraine No. 359 of 29.06.2005.
3. Order of the Ministry of Defence of Ukraine of 29.09.2014 No. 685.
4. Order of the NGS of 30.05.2017 No. 191dsk "On Approval of the Regulation on Arsenals, Bases and Storage Depots for Missiles and Ammunition of the Armed Forces of Ukraine".
5. Order of the Ministry of Defence of Ukraine dated 29.11.17 No. 635 "On Approval of the Instruction on Development of Action Plans for the Functional Subsystem of Emergency Prevention and Response in the Ministry of Defence of Ukraine and the Armed Forces of Ukraine".
6. Order of the Ministry of Defence of Ukraine of 06.06.17 No. 5dsk "On Approval of the Procedure for Organising Access Control at Particularly Important and Restricted Facilities of the Ministry of Defence of Ukraine and the Armed Forces of Ukraine".

7. Order of the Ministry of Defence of Ukraine of 18.08.2016 No. 429dsk "On Approval of the Instruction on the Organisation and Procedure of Actions by Level of Terrorist Threats".
8. Modern weapons and military equipment of the armed forces of the Russian Federation. Handbook of the JFO participant. Kharkiv 2020.
9. Use of foreign-made weapons by the security and defence forces of Ukraine (instructions for use). Kyiv 2023.
10. Weapons of the Russian-Ukrainian War of 2022-2023. Kyiv 2023.
11. Order of the National Guard of Ukraine No. 289 dated 18.08.2017 "On Approval of the Procedure for the Bookmarking and Storage of Anti Terrorism Plans".
12. Order of the Ministry of Defence of Ukraine of 04.01.2019 No. 4 "On Approval of the Instruction on Categorisation of Missile and Artillery Weapons".

Information resources

1. Website of the Military Academy (Odesa). www.vaodessa.org.ua.
2. Electronic library of the Military Academy (Odesa) (internal network). <http://192.168.1.254/>.
3. Electronic library of the Department of Missile and Artillery Armament (internal network of the Military Academy (Odesa)). <http://192.168.1.254/index.php/kafedra-rao>.
4. Website of the Ministry of Defence of Ukraine. <http://www.mil.gov.ua/>.

Types, topics of training sessions and training questions

№ s/ n	Types of training sessions, control measures	Total hours	Among them.		Topic, purpose and objectives of the training session, study questions
			Training classes	Independent work	
1	2	3	4	5	6
		90	44	46	Section 1. Organisation of ammunition storage on the ammunition storage system
		34	14	20	Topic 1: Safety measures and the procedure for training in safety rules at the ABS.
1.	Lecture	6	2	4	<p>Lesson 1: Safety measures for handling property at ABS.</p> <p>1. General provisions of safety measures when handling property at the ABS. 2. Work with increased risk.</p> <p>Independent work</p> <p>1. Training procedure and types of briefings. 2. Safety measures when handling pyrotechnics. 3. Organisation of safety measures during the handling of pyrotechnics. 4. Safety precautions when working with high-pressure air.</p>
2.	Group session	6	2	4	<p>Lesson 2: Special precautions for handling missiles and ammunition.</p> <p>1. Special safety measures when handling rockets. 2. Safety measures during routine maintenance and repair of missiles. 3. Special precautions for handling ammunition.</p> <p>Independent work</p> <p>1. Safety measures during loading and unloading of ammunition. 2. Safety measures during technical inspections and repair of ammunition. 3. Organisation of security measures during technical inspections and repair of ammunition. 4. Special safety measures when performing work with increased risk.</p>

3.	Group session	6	2	4	<p>Lesson 3: Safety rules for working with missiles and ammunition.</p> <p>1. General safety rules for working with missiles and ammunition. 2. Safety rules for working with powders.</p> <p>Independent work</p> <p>1. Safety rules during repair. 2. Safety rules when disassembling the shot.</p> <p>1. Organise safety rules for disassembling the shotgun. 2. Safety rules for carrying out routine maintenance of the ATGM.</p>
4.	Group session	6	2	4	<p>Lesson 4. Loading and unloading operations and transportation of property.</p> <p>1. General provisions for loading and unloading and transport missiles and ammunition. 2. Domestic transportation of missiles on ABS.</p> <p>Independent work</p> <p>1. General provisions of loading and unloading operations. 2. Transportation of missiles and ammunition. 3. Organisation and transportation of missiles and ammunition. 4. 4. Domestic transportation of missiles on ABS.</p>
5.	Group session	6	2	4	<p>Lesson 5. Transport of dangerous goods (ammunition).</p> <p>1. Requirements of the guidelines for the transport of ammunition. 2. Organisation of ammunition transportation by various means of transport.</p> <p>Independent work</p> <p>1. Requirements of the guidelines for the transport of ammunition. 2. Requirements of NATO standards for the transport of ammunition. 3. Organisation of ammunition transportation in accordance with NATO standards. 4. Organisation of ammunition transportation by various means of transport.</p>
6.	Seminar	4	4		<p>Lesson 6. Safety measures and handling and transport of ammunition.</p> <p>1. General provisions for loading and unloading and transport missiles and ammunition. 2. Requirements of the guidelines for the transport of ammunition. 3. Requirements of NATO standards for the transport of ammunition.</p>
		16	8	8	Topic 2. Acceptance and dispatch of missiles and ammunition at the launching site.
7.	Group session	6	2	4	<p>Lesson 1: Acceptance of missiles and ammunition.</p> <p>1. General overview and quantitative reception of missiles and ammunition.</p>

					<p>2. Technical acceptance of missiles and ammunition. Independent work</p> <ol style="list-style-type: none"> 1. General inspection of missiles and ammunition when receiving missiles and ammunition. 2. Quantitative acceptance of missiles and ammunition. 3. Requirements of the guidelines for technical acceptance of missiles and ammunition. 4. Organisation of technical acceptance of missiles and ammunition by different nomenclatures.
8.	Group session	6	2	4	<p>Lesson 2: Sending missiles and ammunition.</p> <ol style="list-style-type: none"> 1. General provisions for the dispatch of missiles and ammunition. 2. The procedure for sending missiles and ammunition. <p>Independent work</p> <ol style="list-style-type: none"> 1. General provisions for sending missiles. 2. The procedure for sending missiles. 3. General provisions for the shipment of ammunition. 4. The procedure for sending ammunition.
9.	Seminar	4	4		<p>Lesson 3: Receiving and dispatching missiles and ammunition.</p> <ol style="list-style-type: none"> 1. General overview and quantitative reception of missiles and ammunition. 2. Requirements of the guidelines for technical acceptance of missiles and ammunition. 3. General provisions for the shipment of ammunition.
		40	22	18	Topic 3. Storage of missiles and ammunition at the storage facilities.
10.	Group session	6	2	4	<p>Lesson 1: Organisation of missile and ammunition storage.</p> <ol style="list-style-type: none"> 1. General provisions for the storage of missiles and ammunition. 2. Equipment of the workplace of the storage manager. 3. Documentation in ammunition storage facilities. <p>Independent work</p> <ol style="list-style-type: none"> 1. General provisions for the storage of missiles. 2. General provisions for the organisation of ammunition storage. 3. Equipment of the workplace of the storage manager. 4. Documentation in ammunition storage facilities.
11.	Group session	6	2	4	<p>Lesson 2: Procedure for placing and stowing missiles and ammunition.</p> <ol style="list-style-type: none"> 1. General provisions for the placement of missiles and ammunition. 2. Peculiarities of storage of certain types of ammunition. <p>Independent work</p> <ol style="list-style-type: none"> 1. General provisions for missile deployment.

					2. Peculiarities of storage of missile components and spare parts. Independent work 3. General provisions for the placement of ammunition. 4. Features of storage of ammunition components.
12.	Group session	4	2	2	Lesson 3: Inspection of missiles. 1. General provisions of missile inspection. 2. Inspection of missile elements. Independent work 1. Documentation of the tests. 2. Storage of training missiles
13.	Group session	4	2	2	Lesson 4. Peculiarities of ammunition storage at open storage sites. 1. General provisions for the organisation of ammunition storage at open storage sites. 2. Equipment of ammunition storage areas at open storage sites. Independent work 1. General provisions for the organisation of ammunition storage at open storage sites. 2. Equipment of ammunition storage areas at open storage sites.
14.	Group session	6	4	2	Lesson 5. Storage of aviation munitions. 1. General provisions for the storage of aviation munitions. 2. Peculiarities of storage of some types of aircraft munitions. Independent work 1. The procedure for storing unguided missiles. 2. Peculiarities of storage of some types of aircraft munitions.
15.	Group session	6	2	4	Lesson 6. The procedure for storing property of the Navy nomenclature. 1. General provisions for the storage of property of the nomenclature of the Navy. 2. Peculiarities of storage of certain types of property of the Navy nomenclature. Independent work 1. General provisions for the storage of property of the nomenclature of the Navy. 2. Features of torpedo storage. 3. General provisions for mine storage. 4. Peculiarities of storage of certain types of property of the Navy nomenclature .
16.	Seminar 3/16	4	4		Lesson 7. Storage of missiles and ammunition at the battery storage facility. 1. General provisions of missile inspection. 2. General provisions for the organisation of ammunition storage at open storage sites.

					3. General provisions for the storage of aviation munitions. 3. General provisions for the storage of property of the Navy nomenclature.
	Control measure	4	4		Differentiated credit
		60	30	30	Section 2. Monitoring of the technical condition of missiles and ammunition, carrying out routine maintenance of MANPADS and ATGMs at the ABS.
		42	18	22	Topic 4. Monitoring of the technical condition of missiles and ammunition on the battery.
17.	Group session	4	2	2	Lesson 1: Monitoring the technical condition of missiles and ammunition. 1. General requirements for monitoring the technical condition of missiles and ammunition. 2. Technical inspection of ammunition. Independent work 1. General requirements for monitoring the technical condition of missiles and ammunition. 2. Technical inspection of ammunition.
18.	Group session	4	2	2	Lesson 2: Technical inspection of missiles and components, procedure for restoring ammunition and missile components. 1. Technical inspection of missiles and components. 2. Procedure for restoring ammunition and missile components before the end of the warranty period. Independent work 1. Technical inspection of missiles and components. 2. Procedure for restoring ammunition and missile components before the end of the warranty period.
19.	Seminar	2	2		Lesson 3: Monitoring the technical condition of missiles and ammunition. 1. General requirements for monitoring the technical condition of missiles and ammunition. 2. Procedure for restoring ammunition and missile components before the end of the warranty period.
20.	Group session	10	2	8	Lesson 4. The procedure for categorising ammunition. 1. General information on ammunition categorisation. 2. The procedure for categorising high-explosive projectiles of all types and calibres. Independent work 1. General information on ammunition categorisation. 2. The procedure for categorising high-explosive projectiles of all types and calibres. 3. The procedure for categorising armour-piercing projectiles. 4. Procedure for categorising concrete pellet guns. 5. The procedure for categorising sub-calibre projectiles. 6. Procedure for categorisation of cumulative projectiles. 7. Procedure for categorising incendiary and smoke shells and projectiles.

					8. The procedure for categorising the main parts of rocket projectiles. 9. The order of categorisation of charges in the caps. 10. Procedure for categorising charges in separate cartridge cases. 11. Procedure for categorising powders in cases with a burning case and burning cylinders for sub-calibre projectiles.
21.	Group session	2	2		Lesson 5. Labelling of powders and explosives. 1. General information about powders and explosives. 2. The procedure for marking powders. 3. Procedure for marking pyrotechnics.
22.	Group session	2	2		Lesson 6. Labelling of powders and explosives. 1. The procedure for marking explosives. 2. The procedure for labelling solid rocket propellants.
23.	Practical session	14	4	10	Lesson 7. Labelling of powders and explosives. 1. Decoding the markings of powders. 2. Decoding the markings of explosives 3. Decoding the markings of rocket fuels 4. Decoding of pyrotechnic markings. Independent work 1. Practical reading of powder markings. 2. Practical reading of explosives labelling. 3. The procedure for categorising mortar charges. 4. The procedure for categorising charges for rocket projectiles. 5. The procedure for categorising smoky powders. 6. The procedure for categorising flame retardants. 7. Procedure for categorising artillery and mortar rounds. 8. Procedure for categorising the collected projectiles of shots. 9. The procedure for categorising 23mm and 30mm rounds 10. The procedure for categorising anti-tank and fragmentation grenades of all types and calibres. 11. Procedure for categorising powder, starting charges and charges for throwing grenade launchers. 12. The procedure for categorising ready-made grenade launchers and fragmentation grenades.
24.	Seminar	2	2		Lesson 8. The procedure for categorising missiles and ammunition. 1. The procedure for categorising mortar charges. 2. The procedure for categorising the collected projectiles of shots.

					3. The procedure for categorising igniters and other pyrotechnic assemblies.
		20	12	8	Topic 5. Organisation of repairs and accounting on ABS.
25.	Group session	6	2	4	<p>Lesson 1: Organisation of accounting for missiles, ammunition and their components on the battery storage system.</p> <p>1. Requirements of the guiding documents on the organisation of accounting for missiles and ammunition and their components at the storage facility.</p> <p>2. Accounting for missiles and ammunition in the OOB on the ABS.</p> <p>Independent work</p> <p>1. Requirements of the guiding documents on the organisation of accounting for missiles and ammunition and their components at the storage facility.</p> <p>2. Accounting for missiles and ammunition in the OOB on the ABS.</p> <p>3. Keeping records of missiles and ammunition in storage departments.</p> <p>4. Keeping records of missiles and ammunition in production units and workshops .</p>
26.	Seminar	2	2		<p>Lesson 2: Organisation of accounting for missiles, ammunition and their components on the battery storage system.</p> <p>1. Requirements of the guiding documents on the organisation of accounting for missiles and ammunition and their components at the storage facility.</p> <p>2. Accounting for missiles and ammunition in the OOB on the ABS.</p> <p>3. Keeping records of missiles and ammunition in storage departments.</p>
27.	Group session	6	2	4	<p>Lesson 3. Repair of unitary and split-case loading rounds.</p> <p>1. General provisions for the organisation of ammunition repair.</p> <p>2. Repair of unitary loading shots.</p> <p>3. Repair of separate cartridge cases.</p> <p>Independent work</p> <p>1. General provisions for the organisation of ammunition repair.</p> <p>2. Repair of unitary loading shots.</p> <p>3. Repair of separate cartridge cases.</p> <p>4. Replace the capsule bushings.</p> <p>5. Replacement of fuzes (tubes).</p> <p>6. Repair of containers.</p>
28.	Seminar	2	2		<p>Lesson 8. Repair of ammunition in the army.</p> <p>1. General provisions for the organisation of ammunition repair.</p> <p>2. Repair of unitary loading shots.</p> <p>3. Repair of separate cartridge cases.</p>
	Control measures	4	4		Examination
	Total for the discipline	150	74	76	