



“Confirmed”

First Vice-Rector
of scientific and pedagogical work
Assoc. Prof. Iryna Solonyenko

2023

CURRICULUM OF THE EDUCATIONAL DISCIPLINE

(type of the discipline – mandatory)

MC 29. Surgical Dentistry

training of specialists of the second (master's) level of higher education

Sphere of Knowledge 22 «Healthcare»

Specialty 221 «Dentistry»

faculty, year: Dentistry, IV

Discussed and approved
at educational-methodical meeting
of the department of surgical dentistry
and maxillofacial surgery

Protocol № 11

Dated from «13» 06 2023

Head of Chair,

prof. Yan Vares

Approved

by the Profile Methodical Commission
on stomatological disciplines

Protocol № 2

Dated from «16» 06 2023

Head of the Profile

Methodical Commission

prof. Yan Vares

DEVELOPED AND CONTRIBUTED: Lviv national medical university named after Danylo Halytskyi

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Discussed and recommended for approval at the interdepartmental meeting of specialists of the single-specialty departments

In dental disciplines

“ _____ ” _____ 2022, protocol No __

INTRODUCTION

CURRICULUM Surgical Dentistry composed

According to Standard of Second level of higher education (master's degree)

Sphere of Knowledge 22 «Healthcare»

Specialty 221 «Dentistry»

educational program of Second level of higher education (master's degree) in specialty 221 Dentistry

Educational program description (abstract). The discipline involves the study of surgical dentistry in its main sections: "Propaedeutics of surgical dentistry", "Inflammatory diseases of the thyroid gland", "Oncology of the maxillo-facial area", "Traumatology of the maxillo-facial area", "Reconstructive and restorative surgery of the maxillo-facial area", with emphasis on pathology, clinics, diagnostics, emergency treatment and prevention of the main and most common diseases of maxillo-facial area (MFA).

Special attention is paid to the formation of students' skills of anamnesis collection, examination and differential diagnosis of thyroid diseases with various clinical course and their complications, modern approaches to diagnostics, principles of treatment and prophylaxis on the basis of evidence-based medicine and urgent conditions are studied in practical surgical dentistry. Students participate in the diagnostic and treatment process of outpatient, inpatient patients under the guidance of assistants and associate professors of the department. There is also an introduction to the treatment-and-prophylactic measures that are most commonly used in surgical dental practice.

The study of the discipline "surgical dentistry" helps to form a holistic view of the structure and functioning of the organs of the thyroid; deepening of theoretical and practical preparation, acquisition of professional practical skills for independent medical activity.

Structure of the discipline	Number of credits, hours, including			Self-study	Year of study/ semester	Test type
	Total	In class				
		Lectures (hours)	Practical (hours)			
Name of the discipline: Surgical Dentistry Number of content modules: 3	4,5 credits / 135 hours	8	60	67	IV course (VII, VIII semesters)	Credit Exam
by semesters						
content module 1	2,5 credits / 75 hours	6	30	39	VII semester	Credit
content modules 2, 3	2 credits / 60 hours	2	30	28	VIII semester	Exam

The subject of study of the discipline are traumatic injuries of the MFA and the oncological processes of the MFA, related to the competence of surgical dentistry and maxillofacial surgery, features of their clinical course, the main diagnostic and treatment manipulations used in the practice of dental surgeon.

Interdisciplinary relations: therapeutic dentistry, pediatric dentistry, orthopedic dentistry, normal anatomy, histology, normal physiology, pathological physiology, topographic anatomy and surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, endocrinology, endocrinology otolaryngology, ophthalmology, medicine of extreme conditions.

1. The purpose and objectives of the discipline

1.1. **The purpose of teaching** the discipline (surgical dentistry) is to provide a comprehensive and highly-specialized training of a dentist, which involves mastering the theory and practice of all sections of surgical dentistry and basics of MFD, from organization of surgical department of dental clinic and maxillofacial hospital to the ability of providing urgent care in extreme conditions and qualified surgical dental and reconstructive-restoration assistance in MFD.

1.2. **The main tasks** of surgical dentistry are to educate a professional surgical dentist who is able to provide a thorough examination of the patient, diagnose the main symptoms and syndromes of MFA pathologies, to substantiate and formulate the preliminary diagnosis; to analyze the results of the examination and conduct differential diagnosis, to formulate a clinical diagnosis of major diseases, to identify the manifestations of somatic diseases in the oral cavity, to define the principles of integrated treatment in the clinic of surgical dentistry, to identify various clinical variants and complications of the most common diseases of the

MFA, to be aware of the measures of primary and secondary prevention the most common surgical dental diseases.

As a result of studying the discipline, the student must

Know:

- Features of the examination of patients with thyroid pathology, participation of related specialists in the examination.
- Methods of examination of patients with trauma to the maxillofacial area. Organizational principles of assistance to the victims with injuries of the maxillofacial area.
- Principles of deontology and medical ethics in surgical dentistry and maxillo-facial surgery.
- Basic methods of general and local anesthesia, sedation in the practice of the dental surgeon (demonstrations, contraindications, features of conducting).
- Traumatic damage of the soft tissues of the MFA.
- Techniques for surgical treatment of soft tissue wounds.
- Dislocations and fractures of the teeth, fracture of the alveolar process, dislocations of the temporomandibular joint (diagnosis, treatment).
- Fractures of the facial skeleton. Modern principles of bone fixation.
- Thermal (burns, frostbite), chemical (acids, alkalis, heavy metal salts), physical (electric shock) facial damage.
- Combined damage of the maxillofacial area. Clinic, diagnosis, treatment. Traumatic disease.
- Organization of dental care in the Armed Forces of Ukraine.
- Principles of medical sorting and stage treatment of the injured in the maxillofacial area.
- General characteristics, clinical course, diagnosis of gunshot wounds, burns, combined lesions of the maxillofacial area.
- Early and late complications of traumatic injuries of the maxillofacial area. Clinic, diagnosis, treatment.
- Organization of oncostomatological care.
- Tumors and tumor-like lesions of the soft tissues and bones of the maxillofacial area.
- Jaw cysts.
- Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma, epulid.
- Benign nonodontogenic tumors of the jaws (osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, etc.).
- Osteogenic tumors of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma).
- Benign tumors of the soft tissues of the MFA (skin, adipose, connective tissue, muscular tissue, nerves, blood and lymphatic vessels).
- Precancerous diseases of the skin of the face, mucous membrane of the mouth and tongue.
- Malignant tumors of soft tissue of the MFA and neck. Cancer and sarcoma of jaws.
- Benign tumors and cysts of the salivary glands.

To be able to:

- Collect anamnesis and to examine the patient for the specified pathology of MFA.
- Make a plan and carry out an examination of the patient with trauma to the maxillofacial area.
- Plan additional research methods and be able to interpret their results.
- Analyze and interpret the results of the X-ray examination in the Surgical Dentistry Clinic and establish an appropriate clinical diagnosis based on them.
- Fill in appropriate medical records.
- Perform diagnostic puncture of abnormal thyroid lesion.
- Perform primary surgical treatment of the wound.
- Demonstrate the technique of applying of surgical knot.
- Provide a tooth replantation.
- Make temporary immobilization of the fragments of the lower and upper jaws.
- Make temporary tires and provide fixation of the jaw fractures.
- Make ligature fixation of the teeth.
- Make a smooth arch bar.
- Carry out permanent immobilization of fragments of the lower and upper jaws.
- Provide fixation of the bimaxillary arch bars as one of the permanent immobilization methods.

- Reposit the dislocation of the mandible.
- Make a plan and carry out an examination of the patient with the presence of a neoplasm, appoint additional methods of diagnostics.
- Collect material (smears and biopsies) for cytological and pathomorphological studies.
- Make an oncodiagnosis based on the results of the examinations.
- Develop a plan for the treatment of a patient with cancer of the MFA.
- Develop a plan for comprehensive treatment of patients with these pathologies.
- Diagnose local and general complications in the practice of the dental surgeon.
- Conduct cardiopulmonary resuscitation (indirect heart massage and CPR) on the phantom
- Provide aid in emergency situations in the practice of maxillo-facial surgery in accordance with appropriate algorithms.

To demonstrate:

- ability to abstract thinking, analysis and synthesis.
- the ability to learn and be up-to-date.
- knowledge and understanding of the subject area and understanding of professional activity.
- ability to apply knowledge in practical situations.
- skills in using information and communication technologies.
- ability to search, process and analyze information from various sources.
- the ability to identify, pose and solve problems.
- the ability to choose a communication strategy.
- ability to work in a team.
- interpersonal skills.
- the ability to act on the basis of ethical considerations (motives), safety orientation.
- knowledge of the moral and deontological principles of a medical specialist and the principles of professional subordination.
- the ability to evaluate and ensure the quality of performed works.
- the ability to act socially responsibly and civically.

1.3 Competence and course results.

In accordance with the requirements of the Standard of Higher Education, the discipline "Surgical Dentistry" provides students with the acquisition of competences:

- Integral (the ability to apply acquired general and professional competences to solve complex tasks of a dentist's professional activity and practical problems in the field of health care in the relevant position, the scope of which is provided by defined lists of syndromes and symptoms of diseases, dental diseases, physiological conditions and somatic diseases, which require special tactics of patient management, emergency conditions, laboratory and instrumental research, medical and dental manipulations; and/or implementation of innovations.

the ability to solve complex problems in the field of health care in the specialty "Dentistry" in professional activity or in the process of study, which involves research or innovation).

- General (ability to abstract thinking, analysis and synthesis; ability to learn and to be trained in accordance with the newest educational tools; ability to apply knowledge in practical situations; skills of using information and communication technologies; ability to search, process and analyze information from different sources; ability to identify, set and solve the problem; the ability to choose a communication strategy; the ability to work in a team; interpersonal skills; the ability to follow the labour safety regulations; the ability to evaluate and provide high quality results).

- Special (professional, subject) (collection of medical information about the patient (history); evaluation of results of laboratory and instrumental research; clinical diagnostics of a dental disease; diagnosis of urgent conditions; identification of the nature and treatment principles of dental diseases; tactics of dealing with dental patients with somatic pathology; performing the range of medical and dental manipulations; treatment of major dental diseases; dealing with medical documentation).

Detailing competencies in the NQF descriptor in the form of "Competency matrix":

Marking

NQF -National Qualifications Framework;

GC- general competencies;

GLO- general learning outcomes;

SC - special (professional, subject) competencies;

SLO- special (professional, subject) learning outcomes;

N- normative type of educational activity within the specialty;

S- selective educational activity.

General competencies (GC) according to the requirements of the NQF:

1. Ability to abstract thinking, analysis and synthesis.
2. Knowledge and understanding of the subject area and understanding of professional activity.
3. Ability to apply knowledge in practice.
4. Ability to communicate in the state language both orally and in writing.
5. Ability to communicate in English.
6. Skills in the use of information and communication technologies.
7. Ability to search process and analyze information from various sources.
8. Ability to adapt and act in a new situation.
9. Ability to identify, pose and solve problems.
10. Ability to be critical and self-critical.
11. Ability to work in a team.
12. The desire to preserve the environment.
13. The ability to act socially responsibly and consciously.
14. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
15. Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.

Special (professional, subject) competencies according to the requirements of the National Qualifications Framework (NQF):

1. Ability to collect medical information about the patient and analyze clinical data.
2. Ability to interpret the results of laboratory and instrumental research.
3. Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.
4. Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.
5. Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.
8. Ability to perform medical and dental manipulations.
9. Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.
10. Ability to organize and conduct medical and evacuation measures.
11. Ability to determine tactics, methods and provide emergency medical care.
12. Ability to organize and conduct screening examinations in dentistry.
13. Ability to assess the impact of the environment on the health of the population (individual, family, population).
14. Ability to maintain regulatory medical records.
15. Processing of state, social and medical information.
16. Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and MFA.
17. Ability to legally support their own professional activities.
18. Ability to provide home care according to the protocols of tactical medicine.

Competency matrix of the educational component Surgical dentistry

Program competencies	Surgical dentistry
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<i>General competencies</i>		
GC 1 Ability to abstract thinking, analysis and synthesis.		+
GC 2 Knowledge and understanding of the subject area and understanding of professional activity.		+
GC 3 Ability to apply knowledge in practice.		+
GC 4 Ability to communicate in the state language both orally and in writing.		+
GC 5 Ability to communicate in English.		+
GC 6 Skills in the use of information and communication technologies.		+
GC 7 Ability to search process and analyze information from various sources.		+
GC 8 Ability to adapt and act in a new situation.		+
GC 9 Ability to identify, pose and solve problems.		+
GC 10 Ability to be critical and self-critical.		+
GC 11 Ability to work in a team.		+
GC 12 The desire to preserve the environment.		+
GC 13 The ability to act socially responsibly and consciously.		+
GC 14 The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.		+
GC 15 Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.		+
<i>Special (professional) competencies</i>		
SC 1 Ability to collect medical information about the patient and analyze clinical data.		+
SC 2 Ability to interpret the results of laboratory and instrumental research.		+
SC 3 Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.		+
SC 4 Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.		+
SC 5 Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.		+
SC 6 Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.		+
SC 7 Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.		+
SC 8 Ability to perform medical and dental manipulations.		+
SC 9 Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.		+
SC 10 Ability to organize and conduct medical and evacuation measures.		+
SC 11 Ability to determine tactics, methods and provide emergency medical care.		+
SC 12 Ability to organize and conduct screening examinations in dentistry.		+
SC 13 Ability to assess the impact of the environment on the health of the population (individual, family, population).		+
SC 14 Ability to maintain regulatory medical records.		+
SC 15 Processing of state, social and medical information.		+
SC 16 Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and MFA.		+
SC 17 Ability to legally support their own professional activities.		+

SC 18 Ability to provide home care according to the protocols of tactical medicine.	+
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Detailing competencies in accordance with the NQF descriptor in the form of "Competency matrix":

Competency matrix

№	Competence	Knowledge	Abilities	Communication	Autonomy and Responsibility
general competencies					
1.	Abstract thinking, analysis and synthesizing; the ability to learn and to be trained in accordance with the latest educational tools.	+	+	+	+
2.	Knowledge and understanding of the subject area and understanding of the profession.	+	+		+
3.	Ability to apply knowledge in practical situations.	+	+	+	+
4.	Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.	+	+	+	
5.	Skills of using information and communication technologies.	+	+	+	+
6.	Ability to search, process and analyze information from various sources.	+	+	+	+
7.	Ability to adapt and act in an unfamiliar situations; the ability to work autonomously.	+	+	+	+
8.	Ability to set, identify and solve problems.		+		+
9.	Ability to choose a communication strategy.			+	+
10.	Ability to work in a team.			+	+
11.	Interpersonal skills.			+	+
12.	Ability to act on the basis of ethical considerations (motives).	+	+	+	+
13.	Skills for safe operation (following the labour safety regulations).	+	+	+	+
14.	Ability to assess and ensure the quality of work performed.	+	+		+
15.	Ability (and desire) to follow the environmentally friendly approach to work.	+	+	+	+
16.	Ability to act in a socially responsible and civic conscious manner.		+	+	+
special (professional, subject) competencies					
1.	Collection of medical information on the patient's condition.	+	+	+	+
2.	Evaluation of the results of laboratory and instrumental research.	+			+
3.	Establishment of a clinical diagnosis of dental disease.	+	+	+	+
4.	Diagnosis of urgent conditions.	+	+	+	+
5.	Planning and conducting preventive measures for dental diseases.	+	+	+	+
6.	Determination of the nature and principles of treatment of dental diseases.	+	+	+	+
7.	Determination of the recommended mode of work, rest and diet in treatment of dental diseases.	+	+	+	
8.	Determination of the management tactics in dealing with dental patient with somatic pathology.	+	+	+	+

9.	Execution of medical and dental manipulations.	+	+	+	+
10.	Conduct treatment of major dental diseases.	+	+	+	+
11.	Organization of medical and evacuation measures.	+	+	+	+
12.	Definition of tactics and provision of emergency medical care.	+	+	+	+
13.	Organization and conducting of dental medical examination of persons subject to dispensary supervision.	+	+	+	+
14.	Assessment of the environmental impact on the health of the population (individual, family, communal health).	+			+
15.	Maintaining medical records.	+	+	+	+
16.	Work with information sources of the state level, of social and medical origin.		+	+	+

Learning outcomes

Integrative learning outcomes, formation of which is facilitated by the discipline:

Normative and variational content of the course, formulated in the terms of learning outcomes

Program learning outcomes		
Code of result of the learning outcome	The content of the learning outcome	Reference to the competency matrix code
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Identify and identify the leading clinical symptoms and syndromes (according to list 1 of educational and professional program – EPP); according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of dental disease (according to list 2 of EPP).	<i>PRE1</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Collect information about the general condition of the patient, evaluate the psychomotor and physical development of the patient, the condition of the organs of the maxillofacial area, based on the results of laboratory and instrumental studies to assess information about the diagnosis (according to list 5 of EPP).	<i>PRE 2</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and / or instrumental) according to the list 5 of EPP, patients with diseases of organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (according to the list 2 of EPP).	<i>PRE 3</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the final clinical diagnosis in accordance with the relevant ethical and legal norms, by making an informed decision and logical analysis of the obtained subjective and objective data of clinical, additional examination, differential diagnosis under the supervision of a supervising doctor in a medical institution (according to list 2.1 of EPP).	<i>PRE 4</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Establish a diagnosis of emergencies under any circumstances (at home, on the street, in a medical institution), in an emergency, martial law, lack of information and limited time (according to list 4 of EPP).	<i>PRE 5</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental	<i>PRE 6</i>

	diseases.	
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Analyze the epidemiological situation and carry out measures of mass and individual, general and local medicament and non-medicament prevention of dental diseases.	<i>PRE 7</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the approach, plan, type and principle of treatment of dental disease (according to list 2 of EPP) by making an informed decision according to existing algorithms and standard schemes.	<i>PRE 8</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the nature of work, rest and the necessary diet in the treatment of dental diseases (according to list 2 of EPP) on the basis of preliminary or final clinical diagnosis by making an informed decision according to existing algorithms and standard schemes.	<i>PRE 9</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the tactics of treatment of the dental patient with somatic pathology (according to list 3 of EPP) by making the decision according to existing algorithms and standard schemes.	<i>PRE 10</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Carry out treatment of major dental diseases according to existing algorithms and standard schemes under the supervision of a doctor-manager in a medical institution (according to list 2.1 of EPP).	<i>PRE 11</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Organize medical and evacuation measures among the population, servicemen, in emergency situations, including martial law, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.	<i>PRE 12</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the tactics of emergency medical care, using the recommended algorithms, under any circumstances on the basis of a diagnosis of emergency in a limited time (according to list 4 of EPP).	<i>PRE 13</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Analyze and evaluate government, social and medical information using standard approaches and computer information technologies.	<i>PRE 14</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Assess the impact of the environment on the health of the population in a medical institution by standard methods.	<i>PRE 15</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.	<i>PRE 16</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.	<i>PRE 17</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.	<i>PRE 18</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Adhere to the requirements of ethics, bioethics and deontology in professional activities.	<i>PRE 19</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Organize the necessary level of individual safety (personal and carers) in case of typical dangerous situations in the individual field of activity.	<i>PRE 20</i>
<i>Kn1, Kn2, Skl1, c2, Com1, Com2, Aut1, Aut2</i>	Perform medical manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1 of EPP) for different segments of the population and in different conditions (according to list 6 of EPP).	<i>PRE 21</i>

<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Perform medical dental manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1 of EPP) for different segments of the population and in different conditions (according to list 7 of EPP).	<i>PRE 22</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Perform manipulations of emergency medical care, using standard schemes, under any circumstances on the basis of a diagnosis of emergency (according to list 4 of EPP) in a limited time (according to lists 6, 7 of EPP).	<i>PRE 23</i>

Learning outcomes in cognitive sphere		
SLO 1	Identify major clinical symptoms and syndromes; using standard methods and data of the patient's history, patient's examination data, knowledge of the person, their organs and systems, to establish a preliminary nosological or syndromic diagnosis of the dental disease.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 11, GC 12, GC 14, GC 16; SC 1, SC 3, SC 4, SC 15.
SLO 2	To collect information on the general condition of the patient, to assess the psychomotor and physical development of the patient, to assess the maxillofacial area, evaluate the information collected from the results of laboratory and instrumental test and provide further diagnosis.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 11, GC 12, GC 14, GC 16; SC 1, SC 2, SC 3, SC 4, SC 5, SC 6, SC 7, SC 8, SC 11, SC 12, SC 14, SC 15, SC 16.
SLO 3	Appoint and analyze a laboratory, functional and / or instrumental examination of a patient for differential diagnostics of the disease.	GC 1, GC 2, GC 3, GC 4, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13; GC 14; SC 1, SC 2, SC 15.
SLO 4	Establish a final clinical diagnosis, following the relevant ethical and legal norms, by making a reasonable decision and logical analysis of the received subjective and objective data of the clinical and additional examination, differential diagnosis under supervision of the head doctor in the conditions of the medical institution.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 14, GC 16; SC 1, SC 3, SC 4, SC 15.
SLO 5	Establish a diagnosis of urgent conditions under any circumstances (at home, on the street, at a medical institution), in an emergency, in the conditions of martial law, lack of information and limited time.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 1, SC 4, SC 15.
SLO 6	Plan and implement preventive measures for spread of dental diseases among the population.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 13, SC 14, SC 15, SC 16.
SLO 7	Analyze the epidemiological condition and carry out measures of mass and individual, general and local, medical and non-pharmacological prevention of dental diseases.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13; GC 14; GC 15, GC 16; SC 1, SC 5, SC 13, SC 14, SC 15, SC 16.
SLO 8	Make the treatment plan of a dental disease by making reasonable decisions (following a well-grounded approach) based on existing algorithms and standard schemes.	GC 1, GC 2, GC 3, GC 5, GC 6, GC 7, GC 8, GC 12, GC 13, GC 14; GC 15, GC 16; SC 1, SC 6, SC 15.
SLO 9	Determine and recommend the working regime, rest and necessary diet for treatment of dental diseases on the basis of a preliminary or final clinical diagnosis by making reasonable decisions (following a	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC

	well-grounded approach) based on existing algorithms and standard schemes.	12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 7, SC 15.
SLO 10	Determine the tactics of managing dental patients with somatic pathology by making reasonable decisions based on existing algorithms and standard schemes.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 10, GC 12, GC 13, GC 14, GC 16; SC 1, SC 7, SC 8, SC 15.
SLO 11	Manage the treatment of major dental diseases by existing algorithms and standard schemes under the supervision of a head doctor in the conditions of a medical institution.	GC 1, GC 2, GC 3, GC 4, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 9, SC 10, SC 15.
SLO 12	Organize medical and evacuation measures among the civil and military population, in conditions of emergency, including martial law, in the course of the deployed stages of medical evacuation, according to the available medical and evacuation equipment.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 11, SC 15.
SLO 13	Determine the tactics of providing emergency medical care using recommended algorithms, under all circumstances, based on the evaluation of urgent condition (emergency diagnosis) in a limited time.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 12, SC 15.
SLO 14	Analyze and evaluate public, social and medical information using standard approaches and computer information technologies.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 8, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 13, SC 15, SC 16.
SLO 15	Assess the environmental impact on the health of the population in the conditions of a medical institution according to standard methods.	GC 1, GC 2, GC 3, GC 5, GC 6, GC 7, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 13, SC 14, SC 15, SC 16.
Learning outcomes in the emotional sphere.		
GLO 1	Set goals and determine the structure of personal activity based on the results of analysis of certain social and personal needs.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 6, SC 7, SC 8, SC 9, SC 10, SC 11, SC 12, SC 13, SC 14.
GLO 2	Maintain a healthy lifestyle, use self-regulation and self-control techniques.	GC 1, GC 2, GC 3, GC 5, GC 6, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 5, SC 14.
GLO 3	Be aware of and guided in their activities by civil rights, freedoms and duties, and raising the general cultural level.	GC 4, GC 5, GC 6, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 5, SC 13, SC 14, SC 16.
GLO4	Adhere to ethical, bioethical and deontology requirements in their professional activities.	GC 1, GC 2, GC 3, GC 4, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 7, SC 9, SC 10, SC 11, SC 12, SC 13, SC 14, SC 15, SC 16.

GLO 5	Organize the necessary level of individual safety (own and those cared for) in case of emergency in the individual sphere of activity.	GC 1, GC 2, GC 3, GC 5, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 6, SC 9, SC 10, SC 11, SC 12, SC 13, SC 14, SC 15.
Learning outcomes in the psychomotor sphere.		
SLO 16	Perform medical manipulations based on a preliminary and / or final clinical diagnosis.	GC 1, GC 2, GC 3, GC 7, GC 9, GC 10, GC 11, GC 13, GC 14, GC 15; SC 9, SC 10, SC 11, SC 12.
SLO 17	Perform dental manipulations based on a preliminary and / or final clinical diagnosis.	GC 1, GC 2, GC 5, GC 6, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15; SC 9, SC 10, SC 11, SC 12.
SLO 18	Perform emergency care manipulations using standardized procedures, under all circumstances, based on emergency diagnosis.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 8, GC 9, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 9, SC 10, SC 11, SC 12.

Matrix of correspondence of the competencies defined by the Standard to descriptors of NQF

Classification of competencies by NQF	<p align="center">Knowledge</p> <p align="center">Kn 1 Specialized conceptual knowledge acquired in the process of learning and / or professional activity at the level of the latest achievements, which are the basis for original thinking and innovation, in particular in the context of research work</p> <p align="center">Kn 2 Critical understanding of problems in teaching and / or professional activities and at the border of subject areas</p>	<p align="center">Skills</p> <p align="center">Skl 1 Solving complex problems and issues that require updating and integrating knowledge, often in conditions of incomplete / insufficient information and conflicting requirements</p> <p align="center">Skl 2 Conducting research and / or innovation activities</p>	<p align="center">Communication</p> <p align="center">Com 1 Clear and unambiguous communication of one's own conclusions, as well as the knowledge and explanations that substantiate them, to specialists and non-specialists, in particular to students</p> <p align="center">Com 2 Use of foreign languages in professional activities</p>	<p align="center">Autonomy and responsibility</p> <p align="center">Aut 1 Making decisions in difficult and unpredictable conditions, which requires the application of new approaches and forecasting</p> <p align="center">Aut 2 Responsibility for the development of professional knowledge and practices, assessment of strategic development of the team</p> <p align="center">Aut 3 Ability to further study, which is largely autonomous and independent</p>
General competencies				
1. Ability to abstract thinking, analysis and synthesis.	Kn 1 Kn 2	Skl 1		Aut 1
2. Knowledge and understanding of the subject area and understanding of professional activity.	Kn 1	Skl 1	Com 1	Aut 2
3. Ability to apply knowledge in practice.	Kn 1	Sc 1	Com 1	Aut 1
4. Ability to communicate in the state language both orally and in writing.			Com 1, Com 2	
5. Ability to communicate in English.			Com 1	
6. Skills in the use of information and communication technologies.	Kn 1		Com 1, Com 2	Aut 2
7. Ability to search process and analyze information from various sources.	Kn 1		Com 1	Aut 2

8. Ability to adapt and act in a new situation.		Skl 1		Aut 1
9. Ability to identify, pose and solve problems.	Kn 1	Skl 1	Com 1	Aut 1
10. Ability to be critical and self-critical.	Kn 2			Aut 1
11. Ability to work in a team.	Kn 2		Com 1, Com 2	Aut 2
12. The desire to preserve the environment.	Kn 1	Skl 1		Aut 1
13. The ability to act socially responsibly and consciously.	Kn 1			Aut 1
14. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.	Kn 1	Skl 1	Com 1	Aut 3
15. Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.	Kn 1	Skl 2		Aut 3
Special (professional) competencies				
1. Ability to collect medical information about the patient and analyze clinical data.	Kn 2	Skl 1	Com 1, Com 2	
2. Ability to interpret the results of laboratory and instrumental research.	Kn 1	Skl 1		Aut 1
3. Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.	Kn 1	Skl 1		Aut 1
4. Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 2	Skl 1	Com 1	Aut 1
5. Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 1	Skl 1		Aut 1
6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 1, Kn 2	Skl 1	Com 1	

7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.		Skl 1		Aut 1, Aut 2
8. Ability to perform medical and dental manipulations.	Kn 1	Skl 1		Aut 1
9. Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 1	Skl 1	Com 1	Aut 1, Aut 2
10. Ability to organize and conduct medical and evacuation measures.	Kn 1, Kn 2	Skl 1	Com 1	Aut 1, Aut 2
11. Ability to determine tactics, methods and provide emergency medical care.	Kn 1, Kn 2	Skl 1		Aut 1, Aut 2
12. Ability to organize and conduct screening examinations in dentistry.	Kn 1	Skl 2	Com 1	Aut 2
13. Ability to assess the impact of the environment on the health of the population (individual, family, population).	Kn 2	Skl 2		
14. Ability to maintain regulatory medical records.			Com 1	Aut 1
15. Processing of state, social and medical information.	Kn 2		Com 1, Com 2	Aut 1, Aut 2
16. Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and MFA.	Kn 1	Skl 1	Com 1	
17. Ability to legally support their own professional activities.	Kn 1		Com 1	Aut 2
18. Ability to provide home care according to the protocols of tactical medicine.	Kn 2	Skl 1	Com 1	Aut 1, Aut 2

Matrix of compliance with the learning outcomes and competencies defined by the Standard

Program learning outcomes	Competencies																																			
	Integral competency	General competencies															Special (professional) competencies																			
		GC1	GC2	GC3	GC4	GC5	GC6	GC7	GC8	GC9	GC10	GC11	GC12	GC13	GC14	GC15	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17	SC18		
PRE1	+	+	+	+		+	+	+	+	+	+					+	+	+		+	+	+						+		+			+			
PRE 2	+	+	+	+	+	+	+	+	+	+	+					+	+											+	+	+	+			+		
PRE 3	+	+	+	+		+	+	+	+	+	+					+	+												+		+			+		
PRE 4	+	+	+	+		+					+					+	+	+		+	+	+						+					+	+		
PRE 5	+	+	+	+		+					+					+	+	+												+			+			
PRE 6	+	+	+	+		+	+	+	+	+	+			+	+	+		+			+							+	+	+		+	+			
PRE 7	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+			+		+							+	+	+			+			
PRE 8	+	+	+	+			+	+	+							+	+			+	+	+				+	+	+								
PRE 9	+	+	+	+			+	+	+	+			+			+					+	+		+								+	+			
PRE 10	+	+	+	+			+	+	+	+						+					+	+		+									+	+		
PRE 11	+	+	+	+						+	+					+								+	+	+					+	+				
PRE 12	+	+	+	+	+	+					+		+	+	+	+										+	+						+	+		
PRE 13	+	+	+	+	+	+	+	+	+	+	+					+										+	+						+	+		
PRE 14	+	+	+	+		+	+	+	+	+		+	+	+	+	+												+		+	+		+			
PRE 15	+	+	+	+		+	+	+	+	+		+	+	+	+	+		+										+	+	+	+					
PRE 16	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PRE 17	+	+	+	+		+				+		+	+	+	+			+										+	+					+		
PRE 18	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+				+						+		+	+	+	+	+		+		
PRE 19	+	+	+	+		+	+	+	+	+	+		+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PRE 20	+	+	+	+						+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	
PRE 21	+	+	+	+							+	+	+											+	+	+	+							+		
PRE 22	+	+	+	+							+	+	+											+	+	+									+	
PRE 23	+	+	+	+							+	+	+											+	+	+	+								+	

- **Learning outcomes for the discipline:** professional training of the dentist, which involves mastering the theory and practice of the sections "Traumatology of MFA", "Surgical dentistry of extreme conditions and military maxillofacial surgery" and "Oncology of MFA"; ability to carry out examination of a surgical dental patient, to diagnose traumatic injuries of soft tissues, teeth and bones of the thyroid gland, the main symptoms of tumors and tumors of the thyroid gland, to justify and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis, identify and identify manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment, identify different clinical options and complications, know the measures of primary and secondary prevention of surgical dental diseases the study of which is provided in the content modules 1, 2 and 3.

2. Information volume of the discipline.

4.5 ECTS credits of 135 hours are allocated for studying of the discipline.

During discipline studying, a student has to:

Content module 1: Oral and Maxillofacial surgery

Explain and interpret the features of traumatic injuries of the thyroid gland, taking into account the aesthetic and functional significance of the face and the topographic proximity of vital organs, the principles of providing emergency assistance to patients with traumatic injuries, the role of specialists in related specialties in the comprehensive examination of the injured.

Analyze the radiographs of patients with traumatic injuries of the bones of the facial skeleton, to determine the indications for conservative or surgical treatment based on the evaluation of clinical and radiological criteria.

Make a plan and conduct a patient's examination with MFA injuries of peacetime, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for patients with combined injuries.

Collect anamnesis and examination results of the patient MFA injuries of peacetime, fill in the relevant medical documentation.

Carry out primary surgical debridement of soft tissue lesions of the thyroid, temporary (transport) immobilization in fractures of the upper and lower jaw, assist with emergency conditions.

Assign an individual scheme of medicament therapy for whole period of treatment, depending on the psycho-somatic state of the patient, the task and volume of surgical intervention. To make appropriate recommendations.

Demonstrate methods of antiseptic cleaning of wounds, technique of suturing during primary surgical debridement, ligature bonding of teeth, production and imposition of bent aluminum tires, their fixation for temporary or prolonged jaw immobilization.

Topic 1. Statistics and classification of maxillofacial injuries. Initial management of the maxillofacial trauma patient's.

General characteristics of traumatic injuries of maxillofacial area in peacetime and under extreme conditions: classification, clinical signs. Traumatic disease: pathogenesis, peculiarities of clinical manifestations of injuries of MFA.

Providing medical aid. Principles of phased-evacuation systems and treating wounds during war time. Paramedical aid to wounds in the maxillofacial area. Pre-medical aid. First medical aid. Qualified medical aid. Specialized medical care.

Principles of examination of patients with trauma in maxillofacial area. Early local and general complications of injuries of MFA (bleeding, asphyxia, shock). Classification, clinical signs, treatment.

Medical documentation in the surgical department (office) of dental clinic and maxillo-facial department of a hospital. Performance measure of dental surgeon. Indications for hospitalization of patients with disorders of the maxillo-facial area, peculiarities of their examination and rehabilitation. Hospital-acquired infection in dental clinic and maxillo-facial hospital, ways of transmission. Protection of patients and medical staff from hospital infections, viral hepatitis, HIV, and others.

Examination of surgical dental patient. Peculiarities of examination of patients with diseases of dento-facial system, injuries, inflammation, benign, malignant tumours and mass, congenital and acquired defects, deformities of maxillo-facial area. The value of personal contact of doctor with patient. Emotional factors associated with facial diseases, injuries and defects and applied treatment. Deontology and medical ethics in dental and maxillo-facial surgery. Collecting subjective data from the patient: Present complaints. Medical history: the disease and its dynamics, previous treatment. Past history: hereditary diseases, Anamnesis Morbi

and comorbidity, bad habits - drugs, alcohol, smoking; heredity, allergological anamnesis. Physical examination: general condition, consciousness. Examination of organs and systems at the hospital.

Examination of the maxillo-facial area. Inspection of face. Palpation. Examination of organs and soft tissues of the mouth, dental examination. General clinical, laboratory and special techniques. Examination of functions of motor and sensory nerves. Examination of salivary glands and their ducts, temporomandibular joint, lymph system of face and neck. Establishing the nature and size of defects and deformities of facial and mouth tissues, condition of adjacent tissues. Assessment of the extent of anatomical, functional and aesthetic defects.

Objective examination methods with modern diagnostic equipment. Rentgenologic: X-ray, tomography, panoramic radiography and pantomography. Application of artificial contrast. Computed tomography and magnetic resonance imaging, radioisotope and ultrasound diagnostics, distant and contact thermography. Morphological methods: cytology of prints, scrapes, puncture material; histological examination of biopsy material. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnosis. The use of computers in diagnosis: X-ray interpretation, operation planning, health outcomes.

Range of examination of patients with disorders of the maxillo-facial area during treatment in outpatient and inpatient departments, participation of allied professionals in examination.

The list of questions to be studied by the student at the lesson:

1. Principles of the organization of dental care to the population of Ukraine.
2. Organization of the operation of the surgical department (cabinet) of the dental clinic.
3. Features of the organization and provision of special surgical dental care.
4. Sanitary-hygienic requirements to the surgical department (cabinet) of the dental clinic and inpatient department.
5. Equipment, medical documentation of the surgical office (department).
6. Subjective examination of a surgical dentist (complaints, history of the disease, history of life).
7. Method of examination of the general condition of a surgical dentist.
8. Method of local examination (extraoral and intraoperative) of a surgical dentist.
9. Additional methods of examination (electroodontometry, radiography, morphological, microbiological, functional research).
10. Indications for hospitalization of dental surgical patients.

Topic 2. Soft tissue injuries: classification, clinical features, diagnostics, treatment. Surgical debridement of soft tissue wounds. Sequence of reparation. Suturing methods. Postoperative wound care.

Classification of traumatic injuries of the soft tissues of the maxillofacial area.

The contusion of soft tissues of the face. Lacerations and wounds of the soft tissues of the face: cut, chipped, chopped, bitten, crushed, scalped. Features of the clinical course. Methods of surgical treatment of wounds and types of sutures. Provision of emergency and first aid to injured patients. Surgical treatment of wounds of maxillofacial area. Methods of care for patients in the postoperative period.

The list of questions to be studied by the student at the lesson:

1. Classification of soft tissue facial injuries in peacetime.
2. Contusion of facial soft tissues - clinical features, diagnosis, emergency.
3. Abrasions and wounds of the soft tissues of the face (contusion, ragged, cut, split, chopped, bite, crushed, scalp).
4. Peculiarities of the clinical picture of soft tissue wounds depending on their location.
5. Basic principles of primary surgical debridement of wounds.
6. Peculiarities of surgical treatment of facial wounds.
7. Specific features of maxillofacial soft tissues affecting the processes of wound healing.
8. Medicinal treatment of wounds in the postoperative period.
9. Physiotherapy treatment of wounds.
10. Classification, clinical features and treatment of complications of facial wounds, their prevention.
11. Medical care for the wounded at place of injury and during medical evacuation.
12. Types of sutures and suture materials. Plastic stitches: purpose and modification.
13. Influence of facial aesthetic disturbances on the psychical status of the patient.

Topic 3. Teeth dislocations and fractures: classification, clinical signs, diagnostics, methods of stabilization, treatment.

Etiology and pathogenesis of teeth dislocations and fractures. Classification. Clinical manifestations of different types teeth dislocations and fractures. Features of examination of patients with dislocations and

fractures of the teeth. Objective methods of investigation. Radiological methods of research: radiography in different projections. Computer tomography. Methods of treatment.

The list of questions to be studied by the student at the lesson:

1. Statistics, classification of teeth dislocations and fractures.
2. Features of etiology and pathogenesis of teeth dislocations and fractures.
3. Clinical picture of teeth dislocations and fractures.
4. Methods of diagnosis of teeth dislocations and fractures.
5. Examination of the patient with teeth dislocations and fractures.
6. To make a plan of treatment of teeth dislocations and fractures.
7. Conservative methods of treatment of teeth dislocations and fractures.
8. Surgical methods of treatment of teeth dislocations and fractures.
9. Rehabilitation of patients with teeth dislocations and fractures.

Topic 4. Mandibular dislocation: clinical features, diagnostics, treatment.

Classification of mandibular dislocations. Etiology and pathogenesis of mandibular dislocation. Clinical manifestations of different types of jaw dislocations. Features of examination of patients with dislocations of the mandible. Objective methods of investigation of dislocation of the mandible. Radiological methods of research: radiography in different projections. Computer and magnetic resonance imaging, ultrasound diagnostics. Methods of management of dislocations of the lower jaw.

The list of questions to be studied by the student at the lesson:

1. Statistics, classification of dislocations of the mandible.
2. Features of etiology and pathogenesis of dislocation of the mandible.
3. Clinic of anterior dislocation of the mandible.
4. Clinic of posterior dislocation of the mandible.
5. Methods of diagnosis of dislocation of the mandible.
6. Examination of the patient with dislocation of the mandible.
7. Theoretical and clinical studies of the problem of dislocation of the mandible.
8. Make a plan for prevention of dislocation of the mandible.
9. To make a plan of treatment of dislocations of the mandible.
10. Conservative methods of treatment of dislocation of the mandible.
11. Surgical methods of treatment of dislocation of the mandible.
12. Rehabilitation of patients with dislocations of the mandible.

Topic 5. Mandibular fractures: classification, clinical signs, treatment.

Frequency, localization and character of damage to the mandible depending on the causes and mechanism of injury. Types and typical locations of mandibular fractures. Biomechanics of mandibular fractures, mechanism and nature of displacement of fragments. Clinical examination of patients with mandibular fractures. Clinical symptoms of mandibular fractures: anatomical and functional disorders, malocclusion, etc. The condition of the teeth in the gap of the jaw fracture. Indications for the removal of these teeth. Intraarticular fractures, fractures with dislocation of the jaw head.

Objective methods of investigation of fractures of the upper jaw with the use of modern diagnostic equipment. Radiological methods of research: radiography in different projections. Computer and magnetic resonance imaging. Methods of functional diagnostics: electromyography, electrodiagnosis. Application of computer software in the stages of diagnostics and planning of surgery for fractures of the upper jaw.

Temporary immobilization of mandibular fractures. Permanent immobilization of the jaws using different types of splints and caps. Types of temporary immobilization in case of the mandibular fractures (Circular bandage, individual mental-parietal bandage, elastic bandage of Pomerantseva-Urbanska, etc.). Indications and contraindications to the ligature binding of teeth and jaws. Ligature binding of teeth and jaws (Ivey, Limberg, Hotsko techniques etc.). Different kinds of splints (dental, dental-gingival etc.). Types of permanent immobilization of the facial skull fractures.

Types and methods of facial skull bones osteosynthesis. Peculiarities of osteosynthesis in the mandibular fractures. Surgical approaches to different parts of the mandible. Types of hardware for osteosynthesis. Extraoral fixation of bone fragments at fractures or large defects of the mandible. Compression-distraction osteosynthesis.

The list of questions to be studied by the student at the lesson:

1. Classification of fractures of the mandible.
2. The mechanism of displacement of the fragments of the mandible.
3. Clinical symptoms of mandibular fractures.
4. X-ray symptoms of mandibular fractures.
5. Methods of diagnosis of fractures of the mandible.

6. Diagnostic techniques for palpation of the mandible.
7. Conservative methods of treatment.
8. Surgical methods of treatment.

Topic 6. Maxillary fractures: classification, clinical signs, treatment.

Frequency, localization and character of damage to the upper jaw, depending on the causes and mechanism of injury. Types and typical locations of fractures of the upper jaw. Biomechanics of fractures of the upper jaw, the mechanism and nature of displacement of fragments. Clinical examination of patients with maxillary fractures. Clinical symptoms of fractures of the upper jaw: anatomical and functional disorders, changes in occlusion, etc. The condition of the teeth in the gap of the jaw fracture. Indications for the removal of these teeth.

Objective methods of investigation of fractures of the upper jaw with the use of modern diagnostic equipment. Radiological methods of research: radiography in different projections. Computer and magnetic resonance imaging. Methods of functional diagnostics: electromyography, electroodontognosis. Application of computer software in the stages of diagnostics and planning of surgery for fractures of the upper jaw.

Types of temporary immobilization cases of the maxilla fractures (Faltin's bandage, Limberg's bandage, sub mental Entin's bandage, etc.). Hardware treatments of the upper jaw fractures (Zbarzh devices, etc.). Types and methods of facial skull bones osteosynthesis. Surgical approaches to different parts of the midface. Types of hardware for osteosynthesis of the midface. Stages of reparative regeneration.

The list of questions to be studied by the student at the lesson:

1. Classification of fractures of the upper jaw
2. Mechanism of displacement of fragments of the upper jaw.
3. Clinical symptoms of fractures of the upper jaw.
4. Radiographic symptoms of fractures of the upper jaw.
5. Methods of diagnosis of fractures of the upper jaw.
6. Conservative methods of treatment.
7. Surgical methods of treatment.

Topic 7. Zygomatic complex and nasal fractures: classification, clinical signs, treatment.

Frequency, localization and character of damage of the zygomatic complex and nasal bones depending on the causes and mechanism of injury. Types and typical locations of the zygomatic complex and nasal bones fractures. Biomechanics of the zygomatic complex and nasal bones fractures, mechanism and nature of displacement of fragments. Clinical examination of patients. Clinical symptoms of the zygomatic complex and nasal bones fractures: anatomical and functional disorders. Objective methods of investigation of fractures of the zygomatic complex and nasal bones with the use of modern diagnostic equipment. Radiological methods of research: radiography in different projections. Computer and magnetic resonance imaging. Methods of functional diagnostics: electromyography, electroodontognosis. Application of computer software in the stages of diagnostics and planning of surgery for fractures of the zygomatic complex and nasal bones.

The list of questions to be studied by the student at the lesson:

1. Classification of fractures zygomatic complex and nasal bones.
2. The mechanism of displacement of the fragments zygomatic complex and nasal bones.
3. Clinical symptoms of the fractures of zygomatic complex and nasal bones.
4. X-ray symptoms of the fractures of zygomatic complex and nasal bones.
5. Methods of diagnosis of the fractures of zygomatic complex and nasal bones.
6. Diagnostic techniques for palpation of the zygomatic complex and nasal bones.
7. Conservative methods of treatment.
8. Surgical methods of treatment.
9. Instrumental additional survey methods.
10. Indications for hospitalization of surgical dental patients.
11. Conservative and surgical methods of treatment of damage to the zygomatic bone and arch, bones of the nose.
12. Scheme of medical treatment of patients with damage to the zygomatic bones and arches, bones of the nose.
13. Complications that can occur with damage to the zygomatic bone and arches, the bones of the nose.

Topic 8. Temporary (transport) immobilization of the facial bones fractures: types, requirements.

Temporary immobilization of mandibular fractures. Permanent immobilization of the jaws using different types of splints and caps. Types of temporary immobilization in case of the mandibular fractures (Circular bandage, individual mental-parietal bandage, elastic bandage of Pomerantseva-Urbanska, etc.). Indications and contraindications to the ligature binding of teeth and jaws. Ligature binding of teeth and jaws

(Ivey, Limberg, Hotsko techniques etc.). Different kinds of splints (dental, dental-gingival etc.). Types of permanent immobilization of the facial skull fractures.

Types of temporary immobilization cases of the maxilla fractures (Faltin's bandage, Limberg's bandage, sub mental Entin's bandage, etc.). Hardware treatments of the upper jaw fractures (Zbarzh devices, etc.).

The list of questions to be studied by the student at the lesson:

1. Methods of immobilization of bone fragments of the facial skull
2. Methods of temporary immobilization
3. Basic principles of evacuation and transport evacuation
4. Types of temporary immobilization in case of the mandibular fractures (Circular bandage, individual mental-parietal bandage, elastic bandage of Pomerantseva-Urbanska, etc.).
5. Types of temporary immobilization cases of the maxilla fractures (Faltina bandage, Limberg bandage, sub mental Entin bandage, etc.).
6. The indications and contraindications to the ligature binding of teeth and jaws.
7. The technique of ligature binding of teeth and jaws (Ivy, Limberg, Hotsko techniques etc.).
8. Types of permanent immobilization of the facial skull fractures.
9. Splinting techniques using different kinds of splints (dental, dentalgingival etc.).
10. Hardware treatments of the upper and lower jaw fractures (Rudko, Zbarzh devices, etc.).

Topic 9. Prolonged (treatment) jaws splint immobilization. Wiring techniques, methods of intermaxillary fixation. Dental, dentogingival and gingival splints. Advantages and disadvantages.

Permanent immobilization of the jaws using different types of splints and caps. Types of temporary immobilization in case of the mandibular fractures (Circular bandage, individual mental-parietal bandage, elastic bandage of Pomerantseva-Urbanska, etc.). Indications and contraindications to the ligature binding of teeth and jaws. Ligature binding of teeth and jaws (Ivey, Limberg, Hotsko techniques etc.). Different kinds of splints (dental, dental-gingival etc.). Types of permanent immobilization of the facial skull fractures.

The list of questions to be studied by the student at the lesson:

1. Methods of immobilization of bone fragments of the facial skull
2. The technique of ligature binding of teeth and jaws (Ivey, Limberg, Hotsko techniques etc.).
3. Types of permanent immobilization of the facial skull fractures.
4. Splinting techniques using different kinds of splints (dental, dentalgingival etc.).
5. Hardware treatments of the upper and lower jaw fractures (Rudko, Zbarzh devices, etc.).
6. Dental, dentogingival and gingival splints.
7. Advantages and disadvantages of permanent immobilization.

Topic 10. A notion about internal fixation. Osteosynthesis techniques. Indications, contraindications, surgical methods, complications. External hardware fixation of facial bone fragments.

Types and methods of facial skull bones osteosynthesis. Peculiarities of osteosynthesis in the mandibular fractures. Surgical approaches to different parts of the mandible. Types of hardware for osteosynthesis. Types of the regeneration of bone tissue. Stages of reparative regeneration. Extraoral fixation of bone fragments at fractures or large defects of the mandible. Compression-distraction osteosynthesis.

Types and methods of facial skull bones osteosynthesis. Surgical approaches to different parts of the midface. Types of hardware for osteosynthesis of the midface. Stages of reparative regeneration.

Osteosynthesis of zygomatic bone and arch.

The list of questions to be studied by the student at the lesson:

1. Indications for osteosynthesis of facial bones.
2. Preparation of the patient for osteosynthesis.
3. Choice of the fragments fixation methods.
4. Peculiarities of osteosynthesis in the lower and upper jaw, zygomatic arch fractures.
5. Hardware operative methods of osteosynthesis.
6. Hardware treatments of the upper and lower jaw fractures (Rudko, Zbarzh devices, etc.).
7. Peculiarities of postoperative period in patients with trauma.
8. Possible complications and ways of prevention.
9. Compression osteosynthesis

Topic 11. Types of bone regeneration, primary and secondary bone healing.

Mesenchymal osteogenesis. Cartilaginous osteogenesis. Factors that influence osteogenesis and regeneration. Types of the regeneration of bone tissue. Stages of reparative regeneration. Cause of the reparative regeneration. Optimization methods of reparative regeneration.

The list of questions to be studied by the student at the lesson:

1. Mesenchymal osteogenesis.

2. Cartilage osteogenesis.
3. Factors that influence osteogenesis and regeneration.
4. Types of bone tissue regeneration.
5. Requirements for the reposition of fragments.
6. Phases of reparative osteogenesis.
7. Causes of impaired reparative regeneration.
8. Methods of optimization of reparative regeneration.
9. Modern methods of research of bone regeneration.
10. Types of fusion of bone fragments at fractures.
11. Conditions for improving the course of osteogenesis.
12. Physiotherapeutic methods of treatment at various stages of reparative osteogenesis.
13. Medicaments used to optimize the course of reparative osteogenesis.

Topic 12. Combined injures of maxillofacial area: clinical features, diagnostics, treatment.

Classification of combined injuries. Pathogenesis of combined injuries. Variants of the clinical flow of combined injuries of the maxillofacial area. Primary surgical treatment the maxillofacial area. Prevention of complications in patients with combined injuries of the maxillofacial area.

The list of questions to be studied by the student at the lesson:

1. Determination of combined injury.
2. Determination of chemical warfare agents.
3. Determination of radioactive substance.
4. Classification of combined injuries.
5. Pathogenesis of combined injuries.
6. Variants of the clinical course of combined injuries of the maxillofacial area.
7. Primary surgical treatment the maxillofacial area.
8. Prevention of complications in patients with combined injuries the maxillofacial area.
9. The concept of radiation disease.
10. Features of the clinical course of radiation disease, depending on the severity.
11. Pre-hospital and hospital care for patients with traumatic shock.
12. Prevention of traumatic shock.
13. Comprehensive effect of trauma on the body.
14. Prevention of complications in combined lesions of MFA and traumatic disease.

Topic 13. Early general and local complications of maxillofacial injures (bleeding, asphyxia, shock). Late complications of maxillofacial injures. Clinical signs, diagnostics, treatment.

Early local and general complications of the injuries of MFA (bleeding, asphyxia, shock). Prolonged tissue compression syndrome of the face. Medical care at place of injury and during medical evacuation. Late local and general complications of the maxillofacial injuries. Prevention of their occurrence. Considering the anatomical and physiological features of MFA, with its non-gunshot and gunshot wounds, there may be a number of complications (bleeding, asphyxia, shock) that are life-threatening. Therefore, the dental surgeon should be able to give timely evaluation of the patient, health care, determine the sequence of medical evacuation and prevention of complications. There are the following types of complications of injuries of the maxillofacial area: Immediate (asphyxia, bleeding, traumatic shock). Delayed complications (suppuration of wounds, abscess and phlegmon of soft tissues, post-traumatic osteomyelitis, post-traumatic maxillary sinusitis, secondary bleeding due to thrombus meltdown, sepsis). Long-term complications (scar deformity of soft tissues, defects of soft tissues, adentia and death of the rudiments of permanent teeth, deformity of the jaws, irregular jaw fracture, malocclusion, bone defects, false joint, delayed growth of jaws, ankylosis and other diseases of temporo-mandibular joint).

The list of questions to be studied by the student at the lesson:

1. Classification of the injuries complications of the maxillofacial area.
2. Asphyxia: types, prevention.
3. Traumatic shock: treatment and prevention.
4. Types of bleeding, how to stop.
5. Prolonged tissue compression syndrome faces.
6. Periods of prolonged compression syndrome.
7. Degrees prolonged compression syndrome.
8. Medical care in long-term syndrome compression
9. Clinic, diagnosis and treatment of post-traumatic osteomyelitis.
10. Clinic, diagnosis and treatment of post-traumatic maxillary sinusitis.

11. Clinic, diagnosis and treatment of post-traumatic mandibular contracture.
12. Clinic, diagnosis and treatment of delayed fragment consolidation.
13. Clinic, diagnosis and treatment of the non-union of the fracture.
14. Clinic, diagnosis and treatment of a false joint.
15. Clinic, diagnosis and treatment of post-traumatic jaw deformity.

Topic 14. Thermal (burns, frostbite), chemical (acids, alkalis, heavy metal salts), physical (electric current) facial injuries.

Thermal damage of the face occupy a significant percentage of injuries in the maxillofacial area. Topographic and anatomical complexity of MFA; the proximity of vital structures, face and neck causing overall severity of patients and frequent development of complications

Classification. Features, causes, severity and depth of injury, possible complications. Treatment of facial burns. Burns caused by Napalm. The electrical accident. Cold injury, frostbite. Clinic, treatment.

Chemical injury: acids, alkali, etc.

Damage to the tissues of the face as a result of the action of penetrating radiation and radioactive contamination. Clinic, diagnostics, treatment of these injuries.

The list of questions to be studied by the student at the lesson:

1. Classification of thermal damage.
2. Features of thermal damage in the maxillofacial area.
3. Clinical picture of burns, methods for determining the area of damaged tissue.
4. Treatment of thermal injuries in MFA; prevention of complications.
5. General principles and types of restorative surgery in MFA.
6. Burn disease symptoms, diagnosis, principles of stepwise assist.
7. Complications of the facial burns

Topic 15. Algorithms of the practical skills implementation (primary wound debridement, temporary and prolonged jaws immobilization).

List of practical skills to be learned by a student:

1. Method of examination of the patient with trauma of the tissues of the maxillofacial area (to collect anamnesis; to conduct external and intraoral examination of the MFA and to assess the volume of tissue damage).
2. To evaluate the general condition of the patient: consciousness, position, presence of external signs of pain, blood loss, impaired vital functions, etc.
3. Be able to assign additional examination methods for thyroid injury and interpret the results (X-ray examination of the facial skull in two or more projections, 3D cone-beam CT, MRI).
4. Be able to determine the general condition of the patient and the need for resuscitation.
5. The technique of applying a bandage (pressure bandage) to the wound.
6. Be able to carry out primary surgical debridement of wound of the soft tissues of MFA: (to prepare a set of tools, dressings and sutures for the debridement of the wound; to conduct antiseptic cleaning of the wound).
7. To carry out temporary and permanent immobilization on the phantom: (impose a slit-like bandage; carry out a mandibular ligature bonding of teeth; make: smooth wire tire, tire with U-shaped bend; tire with inclined plane; tire with hooked loops; models using steel ligatures).
8. Be able to carry out hardware operative methods of osteosynthesis of skeletal bones on models and phantoms. Learn to fix the apparatus of V.F. Rudko.
9. To demonstrate the method of osteosynthesis of jaw bones on phantoms:
 - a) fixate the fragments of jaw with the bone suture;
 - b) fixate the fragments of jaw with mini-plates and screws.
10. Prepare a set of tools for repositioning the zygoma and arch, the bones of the nose.
11. Perform repositioning of the zygomatic bone and the zygomatic arch:
 - a) extraoral method;
 - b) intraoral method;
 - c) osteosynthesis at the fracture of the zygomatic bone.
12. To stop bleeding from soft tissues of the MFA using:
 - a) a tight wound tamponade;
 - b) diathermocoagulation;
 - c) clamping on the vessel;
 - d) ligation of the vessel in the wound and beyond it.
13. Demonstrate on the phantom and explain methods for evaluation of skin burn area after thermal damage.
14. Demonstrate on the phantom algorithms for emergency assistance in the development of asphyxia.
15. To master the method of temporary stopping of bleeding from the wounds of the maxillofacial area by finger pressing. Conduct:

- a) pressing of the common carotid artery;
 - b) pressing of the facial artery;
 - c) pressing of the temporal artery.
16. To make a plan of complex treatment of the patient with certain injury of the MFA.

The list of questions that the student should study for mastering the content module 1

1. Subject and tasks of surgical dentistry and maxillofacial surgery of extreme situations.
2. Organization of surgical dental care in the civil care system.
3. First aid to the injured in the maxillofacial area.
4. Pre-medical care.
5. First aid.
6. Qualified medical care.
7. Specialized medical care.
8. Classification of injuries of soft tissues of the face of peacetime.
9. Contusion of soft tissues of the face - clinic, diagnostics, first aid.
9. Abrasion and wounds of soft tissues of the face (slaughtered, torn, cut, chipped, chopped, bitten, crushed, scalped) - clinic, diagnostics, first aid.
10. Features of a clinical picture of wounds of soft tissues depending on their localization.
11. Basic principles of conducting pf primary surgical debridement of the wounds on the face.
12. Characteristic features of soft tissues of the MFA that affect the processes of wound healing.
13. Medicinal methods of treatment of wounds in the postoperative period.
14. Physiotherapeutic methods of treatment of wounds.
15. Medical care for the wounded at the scene of the injury and at the stages of medical evacuation.
16. Types of sutures and suture material. Plate sutures: purpose and modifications.
17. Impact of disorders of aesthetics of the face on the psyche of the wounded.
18. Plastic surgery in the treatment of facial wounds.
19. Methods of immobilization of facial skull bones.
20. Methods of temporary immobilization.
21. Choice of methods of fixation of fragments.
22. Implications and contraindications for ligature fixation of teeth and jaws.
23. Technique for ligature fixation of teeth and jaws (by Ivy, Limberg, Gotzko, etc.).
24. Types of permanent immobilization in fractures of the bones of the facial skull.
25. Types of tires used for permanent immobilization in fractures of the jaws (dental, dentoalveolar, alveolar).
26. Types and methods of osteosynthesis of facial skull bones.
27. Indications for osteosynthesis of facial skull bones.
28. Preparation of the patient for osteosynthesis.
29. Apparatus methods of osteosynthesis.
30. Classification of mandibular fractures.
31. Clinical picture of mandibular fractures.
32. Methods for diagnosis of mandibular fractures.
33. Temporary immobilization in mandibular fractures.
34. Conservative (orthopedic) methods of permanent immobilization in the treatment of non-gunshot fractures of the mandible.
35. Surgical orthopedic methods of permanent immobilization in the treatment of non-gunshot fractures of the mandible.
36. Surgical methods of treatment of damage to the upper jaw.
37. Classification of fractures of the upper jaw.
38. Clinic of non-gunshot fractures of the upper jaw.
39. Diagnosis of non-gunshot fractures of the upper jaw.
40. Methods of temporary immobilization in the treatment of non-gunshot fractures of the upper jaw.
41. Conservative (orthopedic) methods of permanent immobilization in the treatment of non-gunshot fractures of the upper jaw.
42. Surgical orthopedic methods of permanent immobilization in the treatment of non-gunshot fractures of the upper jaw.
43. Surgical methods of treatment of injuries of the upper jaw.
44. Topographic and anatomical features of the middle area of the face.
45. Statistics and classification of fractures of the nasal, zygomatic bone and arch.
46. Nasal fractures, clinic, diagnosis, treatment.
47. Fractures of the zygomatic arch, clinic, diagnosis, treatment. Conservative and surgical treatment.
48. Features of the postoperative period in traumatic patients. Possible complications.

49. Mesenchymal osteogenesis.
50. Cartilage osteogenesis.
51. Factors affecting osteogenesis and regeneration.
52. Types of bone tissue regeneration.
53. Stages of reparative regeneration.
54. Causes of impaired reparative regeneration.
55. Methods of optimization of reparative regeneration.
56. Methods for restoring the integrity of the skeletal bones and post-traumatic defects. Osteoplastic surgery.
57. Features of rehabilitation of patients with injuries of the maxillofacial area. Medical Ethics and Deontology.
58. Comprehensive effect of trauma on the body.
59. Traumatic disease, classification of its periods, diagnosis.
60. Clinical manifestations of traumatic disease, especially in the damage of MFA.
61. Complex therapy of traumatic disease, prevention of complications.
62. Traumatic shock, its stages, clinic, diagnosis.
63. Algorithm for providing emergency medical care for traumatic shock, treatment during the stages of medical evacuation.
64. Pre-hospital and hospital care for patients with traumatic shock.
65. Prevention of traumatic shock.
66. "Mutual burden syndrome".
67. Traumatic Toxemia (Crash Syndrome), "Position Compression Syndrome", clinical signs, periods of disease, local changes in the area of traumatic tissues, first aid and treatment principles.
68. Classification of complications in injuries of the MFA.
69. Asphyxia: types, prevention measures.
70. Traumatic shock: treatment and prevention measures.
71. Types of bleeding, ways to stop them.
72. Classification of thermal damage.
73. Peculiarities of thermal damages in MFA.
74. Clinical picture of burns, methods for determining the area of damaged tissue.
75. Treatment of thermal injuries in the MFA, preventing the occurrence of complications.
76. General principles and types of recurrent surgical interventions in MFA.
77. Burn disease, clinic, diagnosis, principles of care.⁷
8. Care of patients with traumatic lesions of MFA.
79. Indications and contraindications to the use of exercise therapy and physiotherapy for patients with traumatic lesions of MFA.

Content module 2: Surgical dentistry of extreme situations and military maxillofacial surgery

Explain and interpret the features of inflammatory, thermal, chemical damages of the MFA, taking into account the aesthetic and functional significance of the face and the topographic proximity of vital organs, the principles of emergency care for patients with extreme traumas, the sequencing of diagnostic and treatment measures in such cases.

Analyze the complexity of traumatic (fire, thermal, chemical) damage of the MFA, to determine the need for involvement of specialists of related specialties, the priority of providing diagnostic and medical care depending on the nature and type of damage, to understand the principles of medical sorting of victims in case of war conflict.

Make a plan and conduct a patient's examination with with MFA injuries after extreme situation or war conflict, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for patients with combined injuries.

Collect anamnesis and examination results of the patient with MFA injuries after extreme situation or war conflict, fill in the relevant medical documentation.

Carry out primary surgical debridement of soft tissue wounds of the MFA, examination of the wound canal in gunshot wounds of the soft tissues and bones of the facial skeleton, temporary (transport) immobilization in cases of fractures of the upper and lower jaw in extreme situations, to provide assistance in emergency situations.

Appoint antishock, analgesic and other types of drug therapy at the stages of the evacuation of the victims in the conditions of hostilities, to provide appropriate recommendations.

Demonstrate the method of antiseptic treatment of gunshot wounds, thermal and chemical lesions of the skin, techniques of suturing during primary surgical debridement, methods of temporary or prolonged jaw immobilization depending on the general condition of the patient and features of damage to the jaw bones, in particular the number of teeth, take measures to prevent asphyxia.

Topic 1. The tasks of military dentistry. The organization of military maxillofacial surgery. The type of medical care in civilian and war time. Principles of the evacuation of the wounded in the maxillofacial area. Military medical doctrine.

Definition and tasks of surgical dentistry of extreme situations. Definition and tasks of military surgical dentistry. Features of providing surgical dental care in peacetime and in wartime. Modern gunshot injury: morphological and clinical features, for wounds, principles of treatment. Immediate complications after the injury.

The essence and tasks of medical evacuation. Stages of medical evacuation. Features of rendering of surgical stomatologic help at the stages of medical evacuation. Features of transportation of the injured to the maxillofacial area. The military medical doctrine, its content and purpose.

The list of questions to be studied by the student at the lesson:

1. Extreme situations in the modern world.
2. Organizational principles of military maxillofacial surgery.
3. Fundamentals of wound ballistics.
4. Differences between medical care in peace and war time.
5. Organization of surgical dental aid in peacetime.
6. Principles of phased-evacuation systems and treating wounds during war time.
7. Military medical doctrine
8. Pre-medical aid.
9. First medical aid.
10. Qualified medical aid.
11. Specialized medical care.

Topic 2. MFA soft tissues gunshot injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Primary debridment.

Modern gunshot injury: morphological and clinical features, for wounds, principles of treatment. Immediate complications after the injury. Organization of surgical aid to maxillofacial wounded under peaceful and extreme conditions. Classification of gunshot wounds of the face. Characteristics of gunshot wounds of the face, depending on the type of weapon. Peculiarities of gunshot injuries according to anatomical and physiological characteristics of the maxillofacial area. Diagnosis of facial gunshot wounds and determining the degree of severity of injury. Volume rendering first aid to victims of gunshot injuries of the face. Conservative and surgical treatment of MFA gunshot wounds.

Types of bleeding. Temporary stopping of bleeding from maxillofacial wounds by using finger pressure. Surgical methods of final stopping of bleeding (ligation of a bleeding vessel, coagulation).

The timing of the intervention. The choice of methods of anesthesia. The sequence of treatment of wounds of the oral mucosa, bones, soft tissues of the face, functional and cosmetic requirements. Indications for the imposition of various types of stitches on the wounds of the face. Primary, primary-delayed suture, early and late secondary sutures. Plate seams. The possibility of holding primary plastics. Secondary surgical debridement. Measures to prevent complications. Surgical treatment of gunshot wounds of thyroid. Terms of intervention. Choosing ways of anesthesia. The sequence of treatment of wounds of the oral mucosa, bones, soft facial tissues, functional and cosmetic requirements. Indications for the application of different types of sutures on the wounds of the face. Primary, primary-delayed suture, early and late secondary sutures. Plate sutures. Opportunities for primary plastics. Secondary surgical treatment of wounds. Preventive measures.

The list of questions to be studied by the student at the lesson:

1. Classification of soft tissue facial injuries in peacetime.
2. Contusion of facial soft tissues - clinical features, diagnosis, emergency.
3. Abrasions and wounds of the soft tissues of the face (contusion, ragged, cut, split, chopped, bite, crushed, scalp).
4. Peculiarities of the clinical picture of soft tissue wounds depending on their location.
5. Basic principles of primary surgical debridement of wounds.
6. Peculiarities of surgical treatment of facial wounds.
7. Specific features of maxillofacial soft tissues affecting the processes of wound healing.
8. Medicinal treatment of wounds in the postoperative period.
9. Physiotherapy treatment of wounds.
10. Classification, clinical features and treatment of complications of facial wounds, their prevention.
11. Medical care for the wounded at place of injury and during medical evacuation.
12. Types of sutures and suture materials. Plastic stitches: purpose and modification.
13. Influence of facial aesthetic disturbances on the psychical status of the patient.

Topic 3. MFA bones gunshot injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Gunshot osteomyelitis.

Gunshot injuries of lower jaw. Classification, clinical flow, diagnosis, medical aid at place of injury. Treatment and prevention. Sequence medical evacuation.

Gunshot injuries of midface. Classification, clinical flow, diagnosis, medical aid at place of injury. Treatment and prevention. Sequence medical evacuation.

Methods of restoring the integrity of the facial skeleton bones and post-traumatic defects. Osteoplastic surgery. Peculiarities of rehabilitation of patients with MFA injuries. Medical ethics and deontology. Organization of feeding to those with wounds in the maxillofacial area. Organization of care for the wounds in the maxillofacial area. Summary of diets. Feeding methods of those wounded in the maxillofacial area. Indications and contraindications for the use of exercise and physiotherapy for those wounded in the maxillofacial area. The main objectives of military medical expertise.

Principles of organization of staged evacuation system for the treatment of the wounded with damage to the face and jaw in the Armed Forces and Navy of Ukraine and in cases of large disasters. The scope and nature of medical care at the stages of evacuation. Features of providing first aid to the wounded.

The list of questions to be studied by the student at the lesson:

1. Clinical course and treatment of MFA bones gunshot injures.
2. Peculiarities of gunshot injuries diagnosis caused by different types of weapons.
3. Classification, clinical features and treatment of MFA bones gunshot injures.
4. Principles of medical sorting of the patients of the wounds with MFA bones gunshot injures.
5. Medical aid for the wounded at place of injury and during medical evacuation.
6. Types of fixation devices. Transport and primary immobilization: purpose and techniques.
7. Osteosynthesis of MFA bones gunshot injures: aim and tasks, indications, techniques, hardware.
8. Reconstructive surgery in the treatment of MFA bones gunshot injures
9. Complications of MFA bones gunshot injures, their prevention.
10. Gunshot osteomyelitis, features of clinical course. Diagnosis and treatment.
11. Methods of restoration of the integrity of the skeletal bones and post-traumatic defects. Osteoplastic surgery.
12. Features of rehabilitation of patients with injuries of maxillofacial area. Medical Ethics and Deontology.

Topic 4. Soft tissues burns injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Complications. Plastic surgery of MFA thermal injures. Face frostbite: classification, clinical signs, diagnosis, treatment managements.

Thermal injuries of the face. Classification. Features, causes, severity and depth of injury, possible complications. Treatment of facial burns. Burns caused by Napalm. The electrical accident. Cold injury, frostbite. Clinic, treatment.

Chemical injury: acids, alkalis, etc.

Damage to the tissues of the face as a result of the action of penetrating radiation and radioactive contamination. Clinic, diagnostics, treatment of these injuries.

Combined radiation injuries of the face. Peculiarities of the course of wound process depending on the stage of radiation sickness. The syndrome of mutual aggravation. Time and peculiarities of surgical treatment of wounds and peculiarities of treatment of fractures and defects of the jaws in combined damage.

Combined injuries of the maxillofacial area. Chemical warfare agents. Radioactive substance. Classification of combined injuries. Pathogenesis of combined injuries. Variants of the clinical course of combined injuries of the maxillofacial area. Primary surgical treatment the maxillofacial area. Prevention of complications in patients with combined injuries the maxillofacial area. The concept of radiation disease. Features of the clinical course of radiation disease, depending on the severity. Features of treatment depending on the severity.

The list of questions to be studied by the student at the lesson:

1. Classification of thermal damage.
2. Features of thermal damage in the maxillofacial area.
3. Clinical picture of burns, methods for determining the area of damaged tissue.
4. Treatment of thermal injuries in MFA.
5. Complications of thermal damage of MFA tissues. Ways of prevention of complications.
6. General principles and types of restorative surgery of MFA.
7. Indications and contraindications for providing of restorative surgery of MFA.
8. Possible complications after restorative surgery of MFA. Ways of prevention and treatment.
9. Burn disease symptoms, diagnosis, principles of stepwise assist.
10. Face frostbite: classification, clinical signs, diagnosis, treatment management.
11. Possibilities of plastic surgery for thermal injuries of the face.

Topic 5. Combined injuries of MFA. Radiation syndrome: clinical signs, the treatment peculiarities. Nutritional status in with MFA gunshot injuries patients. Physiotherapy methods in patients with gunshot injuries. Summary lesson in “Surgical dentistry of extreme situations and military maxillofacial surgery”

Combined injuries of the maxillofacial area. Chemical warfare agents. Radioactive substance. Classification of combined injuries. Pathogenesis of combined injuries. Variants of the clinical course of combined injuries of the maxillofacial area. Primary surgical treatment the maxillofacial area. Prevention of complications in patients with combined injuries the maxillofacial area. The concept of radiation disease. Features of the clinical course of radiation disease, depending on the severity. Features of treatment depending on the severity. Peculiarities of rehabilitation of patients with MFA injuries. Medical ethics and deontology. Organization of feeding of patients with wounds in the maxillofacial area. Organization of care for the wounds in the maxillofacial area. Types of diets. Feeding methods of wounded in the maxillofacial area. Indications and contraindications for the use of exercise and physiotherapy for wounded in the maxillofacial area. The main objectives of military medical expertise.

The list of questions to be studied by the student at the lesson:

1. Determination of combined injury.
2. Determination of chemical warfare agents.
3. Determination of radioactive substance.
4. Classification of combined injuries.
5. Pathogenesis of combined injuries.
6. Variants of the clinical course of combined injuries of the maxillofacial area.
7. Prevention of complications in patients with combined injuries the maxillofacial area.
8. The concept of radiation disease.
9. Features of the clinical course of radiation disease, depending on the severity.
10. Features of treatment depending on the severity.
11. Clinical aspects of the anatomy of the maxillofacial area and the gastrointestinal tract.
12. Peculiarities of injuries of the maxillofacial area.
13. Subject and tasks of medical physical gymnastics and physiotherapy.
14. Organization of feeding of the patients with wounds of the maxillofacial area.
15. Types of diets.
16. Feeding methods of wounded in the maxillofacial area.
17. Indications and contraindications for the use of exercise and physiotherapy for wounded in the maxillofacial area.
18. The main objectives of military medical expertise.

The list of questions that the student should study for mastering the content module 2

1. Tasks of surgical dentistry of extreme situations.
2. Organization of surgical dental care to the wounded in the maxillofacial area in the Armed forces of Ukraine.
3. The cause of injuries of the MFA.
4. Military-medical doctrine.
5. Principles of medical sorting and evacuation of the wounded in the maxillofacial area.
6. The principles of staged medical care. Medical care on the battlefield and on the stages of medical evacuation.
7. The volume and content of medical care to the wounded in the maxillofacial area in peace and war time.
8. Gunshot injuries of soft tissues of MFA: classification, clinic, diagnostics, principles and methods of treatment, staged treatment.
9. Primary surgical treatment of wounds.
10. Gunshot injuries of bones of the face: classification, diagnosis, clinical features, medical care at stages of medical evacuation.
11. Gunshot osteomyelitis.
12. Modern gunshot wound: features, treatment.
13. Thermal injuries of the face in extreme condition: clinical features, diagnosis, medical aid at the stages of medical evacuation.
14. Burn disease: clinic, diagnostics, treatment.
15. Plastic surgery of the thermal damage of the face.
16. Asphyxia caused by tissue damage: classification, clinical features. Treatment.
17. Bleeding caused by tissue damage: classification, treatment.
18. Neck injuries: clinical features and treatment.
19. Foreign bodies of the maxillofacial area: etiology, clinical flow, ways to remove.

20. Frostbite of the face: classification, clinical manifestations, diagnosis, treatment.
21. Combined injuries of MFA.
22. Radiation disease: clinical manifestations, peculiarities of treatment, the syndrome of mutual aggravation.
23. Complications of maxillofacial injuries, their diagnostics. Medical care on the battlefield and on the stages of medical evacuation.
24. The feeding of the wounded in the maxillofacial region. Types of diets.
25. Care for the wounded. Exercise therapy and physiotherapy in the treatment of the wounded in the maxillofacial area.
26. Military-medical examination of the wounded in the MFA.

Content module 3: Oncology of the maxillofacial area

Explain and interpret the principles of deontology and medical ethics in surgical dentistry and maxillofacial department (MFD), methods of examination of the patients with tumors or tumor-like lesions; involvement of adjacent specialists in the examination and treatment plans.

Analyze the indications and contraindications regarding the assignment to patients of various additional methods of diagnostics and surgical interventions. Be able to analyze and explain the choice of anesthesia method.

Make a plan and conduct a patient's examination with tumors or tumor-like lesions of MFA, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for AIDS patients.

Collect anamnesis and examination results of the patient with tumors or tumor-like lesions of MFA, fill in the relevant medical documentation.

Collect the material for additional research (microbiological, cytological, histological).

Assign an individual scheme of medicament therapy for whole period of treatment, depending on the psycho-somatic state of the patient, the task and volume of surgical intervention. To make appropriate recommendations.

Demonstrate skills of examination of the patients with tumors or tumor-like lesions of the maxillofacial area; providing of aid in the presence of tumors or tumor-like lesions; application of various techniques of biopsy; providing emergency aid in the presence of life-threatening conditions.

Topic 6. Classification of tumours of MFA, etiology, pathogenesis, conformities of growth and development of benign tumours, modern methods of their diagnostics. Principles of management. Cysts of jaws (odontogenic and nonodontogenic, epithelial and non-epithelial): classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, surgical treatment, complications.

Classification of tumours of MFA, etiology, pathogenesis, conformities of growth and development of benign tumours, modern methods of their diagnostics. Tasks for dentists in general diagnostics of tumours of maxillofacial area. Importance of early diagnostics of tumours of maxillofacial area. Principles of examination of patients with tumours of maxillofacial area. Cytological and histological diagnostics of tumour processes. TNM classification system.

Cysts of jaws (odontogenic and nonodontogenic, epithelial and non-epithelial). Odontogenic cysts of jaws (radicular, follicular, subperiosteal, paradental, retromolar). Odontogenic cyst – radicular. Classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics. Surgical treatment technics. Clinical manifestations, diagnostics, growth mechanism, pathological anatomy, methods of surgical treatment: cystotomy, cystectomy, two-stage method, plastic cystectomy, oro-nasal cystectomy. Surgery, postoperative management of patients. Plan of complex treatment of patients with the specified pathology. Complications.

The list of questions to be studied by the student at the lesson:

1. What is "tumour".
2. Etiologic factors that predetermine the origin of tumours of maxillofacial area. Varieties of carcinogens.
3. Morphological and biochemical features of tumour tissues.
4. Physical and chemical carcinogens.
5. Features of oncovirus.
6. Cytological and histological diagnostics of tumour processes.
7. Theories of origin of tumours. Phases of carcinogenesis.
8. Classifications of tumours of maxillofacial area.
9. Classification and features of benign tumours of maxillofacial area.
10. Comparative description of benign and malignant tumours.
11. Basic methods of diagnostics of maxillofacial area tumours.
12. Pathomorphological description of a tumour-like processes of jaws.

13. Growth features of cysts.
14. Ways of spreading of the pathogenic microorganisms to the periapical area of tooth.
15. Classification of odontogenic and non-odontogenic cysts.
16. Etiology, pathogenesis, clinical signs and treatment of radicular cysts.
17. Etiology, pathogenesis, clinical signs and treatment of follicle cysts.
18. Etiology, pathogenesis, clinical features and treatment of innate cysts of jaws.

Topic 7. Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma, epulis: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.

Types of odontogenic tumours of MFA. Classification: ameloblastoma (adamantinoma), odontoma, cementoma, fibroma, mixoma, epulis. Etiology and pathogenesis of odontogenic tumours of jaws. Clinical features of benign odontogenic tumors of the jaws. Epulis. Clinical signs, diagnosis, differential diagnosis and treatment. Possible complications of odontogenic tumours of MFA, ways of their prevention and treatment.

The list of questions to be studied by the student at the lesson:

1. Type of odontogenic tumours of MFA.
2. Etiology and pathogenesis of odontogenic tumours of jaws.
3. Pathological anatomy of different types of odontogenic tumours.
4. Clinical signs of ameloblastoma, diagnostics, differential diagnosis, treatment.
5. Clinical features, diagnostics, differential diagnosis and treatment of odontoma.
6. Clinical signs, diagnostics, differential diagnosis and treatment of cementoma.
7. Epulis. Clinical signs, diagnosis, differential diagnosis and treatment.

Topic 8. Benign nonodontogenic tumors of jaws: osteoblastoma, osteoclastoma, osteoma, hondroma, peripheral giant cell granuloma, haemangioma, fibroma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.

Etiology, pathogenesis, basic clinical symptoms and principles of diagnosis of benign tumors of jawbone. Histological structure, differential diagnosis. Plan of complex treatment of patients with the specified pathology. Examination of patients for the purpose of tumor diagnosis, role of modern methods of examination (radiological, radioisotope diagnostics, cytological and histological verification of tumors). Bone-forming tumors: osteoma, osteoidosteoma, osteoblastoma, ossified fibroma (fiberoosteom). Cartilage tumors: chondroma, osteochondroma (cartilage exostosis). Giant cell tumor (osteoblastoclastoma).

The list of questions to be studied by the student at the lesson:

1. Classification of benign tumors of the jaws.
2. Etiopathogenesis of benign jaw tumors.
3. Features of clinical course of benign tumors of jaws.
4. Methods of diagnosis of benign tumors of jaws.
5. Methods of treatment and rehabilitation of patients with benign tumors of jaws.
6. Principles of prevention of the development of complications in patients with the specified pathology.
7. Osteoblastoma, clinic, diff. diagnosis, treatment.
8. Osteoclastoma, clinic, diff. diagnosis, treatment.
9. Osteoma, clinic, diff. diagnosis, treatment.
10. Osteoid-osteoma, clinic, diff. diagnosis, treatment.
11. Chondroma, clinic, diff. diagnosis, treatment.
12. Hemangioma, clinic, diff. diagnosis, treatment.
13. Fibroma, clinic, diff. diagnosis, treatment.

Topic 9. Benign fibroosseous lesions of the jaws: fibrous dysplasia, cement osseous dysplasia, parathyroid osteodystrophia. Paget disease, cherubism, eosinophilic granuloma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.

Benign fibroosseous lesions of the jaws: fibrous dysplasia, cement osseous dysplasia, parathyroid osteodystrophia, Paget disease, cherubism, eosinophilic granuloma. The main diagnostic methods, differential diagnosis. Clinical signs on all the stages of clinical course. Methods of surgical treatment. Complications and their prevention.

The list of questions to be studied by the student at the lesson:

1. Etiology and pathogenesis of tumour-like lesions of the jaws.
2. Influence of endocrine pathology, carcinogenic teratogens, heredity on the formation of tumourlike lesions of the jaws.
3. Basic principles of diagnostics of fibro-osseous lesions of the jaws.
4. Clinical features of fibro-osseous lesions of the jaws.

5. Differential diagnostic.
6. Clinical signs on all the stages of clinical course of fibro-osseous lesions of the jaws.
7. Methods of surgical treatment of fibro-osseous lesions of the jaws.
8. Complications and their prevention.

Topic 10. Benign soft tissues tumours of the maxillofacial area (skin, fat, connective, muscle and nerve tissues tumors, tumors of blood and lymphatic vessels): classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications. MFA tumor-like lesion: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications, prevention.

Clinical features, diagnostics, treatment of benign tumors of connective tissue. Clinical features, diagnostics, treatment of benign tumors of the adipose tissue. Clinical signs, diagnostics, treatment of benign neurogenic tumors and tumor-like lesions. Etiology and pathogenesis of vessels benign tumors of MFA: hemangioma, lymphangioma. Clinical features, diagnostics, treatment of hemangioma. Clinical features, diagnostics, treatment of lymphangioma.

Pathomorphology of innate of tumor-like lesion. Clinical signs, diagnostics, treatment of dermoid and epidermoid cysts. Clinical signs, diagnostics, treatment of middle cysts and fistulas of the neck. Clinical signs, diagnostics, treatment of lateral cysts and fistulas of the neck. Differential diagnosis of innate tumor-like lesions.

Tumor-like formation of fibrous tissue: gum fibromatosis, radial keloid, keloid, peripheral giant cell granuloma (giant cell epulis), fibromatous and angiomatous epulis. Tumor-like formation of adipose tissue: diffuse lipomatosis. Tumor-like formation of lymphatic vessels: systemic lymphangiomatosis. Tumor-like formation of peripheral nerves of the face: neurofibromatosis (Recklinghausen's disease), traumatic neuroma. Tumor-like germline origin: teratoma (dermoid cyst). Congenital cyst and fistula from embryonic remains. Lateral (bronchiogenic), middle (thyroglossal) cyst and fistula of the face and neck. Etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment. Examination of patients for the purpose of diagnosis of tumor-like lesions, the role of modern methods of examination (radiological, radioisotope diagnostics, cytological and histological verification). Plan of complex treatment of patients with the specified pathology. Complications, prevention.

The list of questions to be studied by the student at the lesson:

1. Etiology and pathogenesis of benign tumours of soft tissues of MFA.
2. Classification of the tumours of soft tissues of MFA.
3. Clinical features, diagnostics, treatment of benign tumours of connective tissue.
4. Clinical features, diagnostics, treatment of benign tumours of fatty tissue.
5. Clinical signs, diagnostics, treatment of benign neurogenic tumours and tumour-like lesions.
6. Principles of complications prevention in patients with benign tumours of soft tissues of MFA.
7. Pathomorphology of congenital tumor-like lesions.
8. Clinical manifestations, diagnosis, treatment of dermoid and epidermoid cysts.
9. Clinical manifestations, diagnosis, treatment of median cysts and fistulas.
10. Clinical manifestations, diagnosis, treatment of lateral cysts and fistulas of the neck.
11. Clinical manifestations, diagnosis, treatment of tumor-like formations of fibrous tissue.
12. Clinical manifestations, diagnosis, treatment of tumor-like formations of adipose tissue.
13. Clinical manifestations, diagnostics, treatment of tumoral formations of lymphatic vessels.
14. Clinical manifestations, diagnosis, treatment of tumors of peripheral nerves of the face.
15. Differential diagnosis of congenital tumors.
16. Principles of treatment of congenital tumors.
17. Prevention of complications.

Topic 11. Precancer skin and mucosal lesions of the face, oral cavity and tongue: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.

Precancer diseases of the face skin, red border of lips, mucous membranes of the oral cavity. Classification. Facultative and obligate diseases. Etiology and pathogenesis of the disease. Clinical manifestations, methods of diagnosis, treatment. Principles and methods of clinical examination of patients with precancerous diseases of the face and oral cavity.

The list of questions to be studied by the student at the lesson:

1. Etiology and pathogenesis of precancerous lesions.
2. Classification of precancerous lesions.
3. Morphological and clinical diagnosis of precancerous lesions.

4. Methods of examination of patients with precancerous lesions.
5. The clinical signs, diagnosis and treatment of precancerous diseases of the skin, oral mucosa and tongue.
6. Differential diagnosis of obligate and facultative forms of precancerous diseases.
7. Features of the histological structure of precancer of the skin, oral mucosa and tongue.
8. Prevention of precancerous lesions.
9. Clinical examination of patients with precancerous lesions.

Topic 12. Malignant soft tissue tumors of the maxillofacial area: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, surgical treatment, radio- and chemotherapy, complications.

Classification, histological structure, clinical forms, stages of disease, differential diagnosis of malignant tumors of MFA. Principles of treatment. Biological basis and immunological aspects of clinical oncology. Peculiarities of growth of a malignant tumor cell and its effect on radiation, cryotherapy, hyperthermia, chemotherapy, oxygenation, ultrasound, hypoxia. Immunotherapy of patients with malignant tumors and comprehensive treatment of patients with malignant tumors. Frequency, etiology, pathogenesis of malignant neoplasms of the skin, mucous membrane and organs of the oral cavity (melanoma, basalioma, carcinoma, sarcoma). Classification, clinical symptoms, diagnostics, modern methods of treatment.

The list of questions to be studied by the student at the lesson:

1. Epidemiology, etiopathogenesis of malignant neoplasms of the skin of the face, mucous membrane and organs of the oral cavity.
2. Principles of diagnosis of malignant tumors of the MFA and neck.
3. Clinic, diagnosis and treatment of melanoma.
4. Clinic, diagnosis and treatment of basalioma.
5. Classification of malignant neoplasms of the oral cavity.
6. Clinical picture of malignant neoplasms of the oral cavity.
7. Principles of treatment of malignant neoplasms of the oral cavity.
8. Mechanism of tumor cell degeneration and further tumor development.
9. Biological carcinogens.
10. Carcinogenesis stages (phases).
11. The mechanism of antitumor resistance of the body.
12. The role of the immune system in the development of tumors.
13. Cytogenetics of malignant growth.
14. Biological characteristics of tumor tissue.
15. Effect on a malignant tumor cell of ionizing radiation.
16. Effect on malignant tumor cell cryotherapy.
17. Effect on malignant tumor cell hyperthermia.
18. Effect on a malignant tumor cell of chemotherapeutic agents.
19. Effect on malignant tumor cell oxygenation.
20. Effect on malignant tumor cell ultrasound.
21. Effect on malignant tumor cell hypoxia.
22. Immunotherapy of patients with malignant tumors.
23. Comprehensive treatment of patients with malignant tumors.

Topic 13. Carcinoma and sarcoma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.

Malignant soft tissue tumors – carcinoma, sarcoma. Etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment. Classification TMN. Clinical signs, diagnostics. Principles of treatment of malignant tumors of the oral cavity (cryotherapy, laser coagulation, surgery, radiation therapy, chemotherapy, combination therapy).

The list of questions to be studied by the student at the lesson:

1. Precancerous conditions of the jaws.
2. Epidemiology, etiopathogenesis of malignant tumours of the jaws.
3. Pathological anatomy of cancer and sarcoma of the jaws.
4. Clinical manifestations of cancer (carcinoma) of the upper jaw, diagnosis and treatment.
5. Clinical manifestations of cancer of the mandible, diagnosis and treatment.
6. Clinical manifestations, diagnosis and treatment of sarcoma of the upper jaw.
7. Clinical manifestations, diagnosis and treatment of sarcoma of the mandible.
8. Surgical treatment of malignant tumours of the jaws.

Topic 14. Benign tumors and cysts of the salivary glands: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications. Malignant tumors of the salivary glands: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.

Clinical and morphological classification of benign tumours and cysts of the salivary glands. Cysts of the salivary glands: retention cysts of minor salivary glands; retention cyst of the sublingual salivary glands (ranula); cysts of submaxillary salivary gland; cysts of the parotid salivary glands; oncocytosis; Kuttner syndrome. Clinical signs, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumour). Clinical signs, diagnosis and treatment of monomorphic adenomas: adenolymphoma (Warthin's tumour), oxyphilic adenoma (oncocytoma), clinical signs, diagnosis and treatment of non epithelial tumours of the salivary glands. Surgical treatment of benign tumours of the salivary glands.

Malignant tumors of the salivary glands. Mucoepidermoid carcinoma of the salivary glands, clinical manifestations, diagnosis and treatment. Adenocarcinoma and cylindroma, clinical manifestations, diagnosis and treatment. The clinical signs, diagnosis and treatment of sarcomas of the salivary glands.

The list of questions to be studied by the student at the lesson:

1. Clinical and morphological classification of benign tumours and cysts of the salivary glands.
2. Cysts of the salivary glands:
 - Retention cysts of minor salivary glands;
 - Retention cyst of the sublingual salivary glands (ranula);
 - Cysts of submaxillary salivary gland;
 - Cysts of the parotid salivary glands;
 - Oncocytosis;
 - Kuttner syndrome.
3. Clinical signs, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumour).
4. Clinical signs, diagnosis and treatment of monomorphic adenomas:
 - Adenolymphoma (Warthin's tumour).
 - Oxyphilic adenoma (oncocytoma).
5. Clinical signs, diagnosis and treatment of non epithelial tumours of the salivary glands.
6. Surgical treatment of benign tumours of the salivary glands.
7. Mucoepidermoid carcinoma of the salivary glands, clinical manifestations, diagnosis and treatment.
8. Adenocarcinoma and cylindroma, clinical manifestations, diagnosis and treatment.
9. Clinical signs, diagnosis and treatment of sarcomas of the salivary glands.

Topic 15. Algorithms for the implementation of practical skills in the sections "Surgical dentistry of extreme conditions and military maxillofacial surgery" and "Oncology of the MFA." Summary lesson

List of practical skills to be learned by a student:

1. To make up a plan of organization of rendering of medical aid to maxillofacial wounded at the stages of medical evacuation.
2. To make a plan of complex treatment of patients with gunshot injuries.
3. To be able to collect anamnesis and to examine patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
4. To be able to make a plan of examination of patients with benign and malignant tumors of the maxillofacial area, tumorous formations.
5. Be able to make plan of diagnosis and interpret additional examination methods in patients with neoplastic neoplasms of soft tissues of the MFA.
6. Be able to carry out a diagnostic puncture.
7. Be able to perform an incisional biopsy.
8. Be able to perform excision biopsy.
9. Be able to identify indications and contraindications to surgical treatment of benign and malignant tumors, tumors and precancerous diseases of the MFA.
10. Be able to make up a plan and volume of medical therapy for patients with benign and malignant tumors of the maxillofacial area and tumor-like lesions.
11. Be able to make up a plan and volume of postoperative medicament therapy.
12. Be able to carry out diathermocoagulation and cryodestruction.
13. Be able to diagnose complications that may arise after surgical treatment of benign and malignant tumors, tumor-like lesions of the MFA.
14. Be able to make a plan of complex treatment of patients with malignant diseases of MFA.

3. Structure of the educational discipline

Topic	Lectures	Practical lessons	Independent work	Individual tasks	
Content module 1: Oral and Maxillofacial surgery					
Topic №1. Statistics and classification of maxillofacial injuries. Initial management of the maxillofacial trauma patient's.	2	2	4	-	
Topic №2. Soft tissue injuries: classification, clinical features, diagnostics, treatment. Surgical debridement of soft tissue wounds. Sequence of reparation. Suturing methods. Postoperative wound care.		2	4,5		
Topic №3. Teeth dislocations and fractures: classification, clinical signs, diagnostics, methods of stabilization, treatment.		2			
Topic №4. Mandibular dislocation: clinical features, diagnostics, treatment.		2			
Topic №5. Mandibular fractures: classification, clinical signs, treatment.		2			
Topic №6. Maxillary fractures: classification, clinical signs, treatment.		2	4,5		
Topic №7. Zygomatic complex and nasal fractures: classification, clinical signs, treatment.		2			
Topic №8. Temporary (transport) immobilization of the facial bones fractures: types, requirements.		2	4,5		
Topic №9. Prolonged (treatment) jaws splint immobilization. Wiring techniques, methods of intermaxillary fixation. Dental, dentogingival and gingival splints. Advantages and disadvantages.		2	2		
Topic №10. A notion about internal fixation. Osteosynthesis techniques. Indications, contraindications, surgical methods, complications. External hardware fixation of facial bone fragments.		2	2		6
Topic № 11. Types of bone regeneration, primary and secondary bone healing.	2		5		
Topic №12. Combined injures of maxillofacial area: clinical features, diagnostics, treatment.	2		6		
Topic №13. Early general and local complications of maxillofacial injures (bleeding, asphyxia, shock). Late complications of maxillofacial injures. Clinical signs, diagnostics, treatment.	2		4,5		
Topic №14. Thermal (burns, frostbite), chemical (acids, alkalis, heavy metal salts), physical (electric current) facial injures.	2				
Topic №15. Algorithms of the practical skills implementation (primary wound debridement, temporary and prolonged jaws immobilization.	2				
Total for content module 1 <i>Auditory work - 48%;</i> <i>Independent work - 52%.</i>	6	30	39	-	
Content module 2: Surgical dentistry of extreme situations and military maxillofacial surgery					
Topic №1. The tasks of military dentistry. The organization of military maxillofacial surgery. The type of medical care in civilian and war time. Principles of the evacuation of the wounded in the maxillofacial area. Military medical doctrine.		2	2	-	
Topic №2. MFA soft tissues gunshot injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Primary debridment.		2	2		

Topic №3. MFA bones gunshot injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Gunshot osteomyelitis.		2	2	
Topic №4. Soft tissues burns injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Complications. Plastic surgery of MFA thermal injures. Face frostbite: classification, clinical signs, diagnosis, treatment managements.		2	2	
Topic №5. Combined injures of MFA. Radiation syndrome: clinical signs, the treatment peculiarities. Nutritional status in with MFA gunshot injures patients. Physiotherapy methods in patients with gunshot injures.		2		
Total for content module 2		10	10	
Content module 3: Oncology of maxillo-facial area				
Topic №6. Classification of tumours of MFA, etiology, pathogenesis, conformities of growth and development of benign tumours, modern methods of their diagnostics. Principles of management. Cysts of jaws (odontogenic and nonodontogenic, epithelial and non-epithelial): classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, surgical treatment, complications.		2	2	
Topic №7. Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma. epulis: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.		2	2	
Topic №8. Benign nonodontogenic tumors of jaws: osteoblastoma, osteoclastoma, osteoma, hondroma, peripheral giant cell granuloma, haemangioma. fibroma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.		2	2	
Topic №9. Benign fibrous lesions of the jaws: fibrous dysplasia, cement osseous dysplasia. parathyroid osteodystrophia. Paget disease, cherubism, eosinophilic, granuloma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.		2	2	
Topic №10. Benign soft tissues tumours of the maxillofacial area (skin, fat, connective, muscle and nerve tissues tumors, tumors of blood and lymphatic vessels): classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications. MFA tumor-like lesion: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications, prevention.		2	2	
Topic №11. Precancer skin and mucosal lesions of the face, oral cavity and tongue: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.		2	2	
Topic №12. Malignant soft tissue tumors of the maxillofacial area: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, surgical treatment, radio- and chemotherapy, complications.		2	2	
Topic №13. Carcinoma and sarcoma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.		2	2	
Topic №14. Benign tumors and cysts of the salivary glands: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications. Malignant tumors of the salivary glands: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.		2	2	

Topic №15. Algorithms for the implementation of practical skills in the sections "Surgical dentistry of extreme conditions and military maxillofacial surgery" and "Oncology of the MFA." Summary lesson		2		
Total for content module 3 Total hours: 60 Auditory work - 53%; Independent work - 47%.	2	30	28	
Total hours in the year: 135 Credits - 4,5; Auditory work - 50%; independent work - 50%.	8	60	67	

4. Lecture schedule for VII /autumn/ semester

№	Topic	Hours
1.	Frequency and classification of the maxillofacial civil trauma (injuries). Dental (teeth) dislocations and fractures, alveolar fractures, temporomandibular joint (TMJ) dislocations. Soft tissue injures. Clinical signs, diagnostics, treatment.	2
2.	Management of maxillofacial trauma in extremal situations. Principles of medical sorting of patients in military conditions. General characteristics, clinical features, diagnostics of gunshot injuries, burns, combined lesions of the maxillofacial area. Modern principles of the maxillofacial fractures management. Types of the bone fixation.	2
3	Tumors of maxillofacial area: classification, principles of diagnostics and treatment. Postoperative care.	2
Total: 6		

Lecture schedule for VIII /spring / semester

№	Topic	Hours
1.	Malignant tumors of MFA soft tissues and bones. Salivary glands tumors. Classifications, clinical features, diagnosis, management principles. Prognosis.	2
Total: 2		

5. Seminar lessons schedule – not provided

6. Practical lessons schedule for VII /autumn/ semester

№	Topic	Hours
1.	Statistics and classification of maxillofacial injuries. Initial management of the maxillofacial trauma patient's.	2
2.	Soft tissue injuries: classification, clinical features, diagnostics, treatment. Surgical debridement of soft tissue wounds. Sequence of reparation. Suturing methods. Postoperative wound care.	2
3.	Teeth dislocations and fractures: classification, clinical signs, diagnostics, methods of stabilization, treatment.	2
4.	Mandibular dislocation: clinical features, diagnostics, treatment.	2
5.	Mandibular fractures: classification, clinical signs, treatment.	2
6.	Maxillary fractures: classification, clinical signs, treatment.	2
7.	Zygomatic complex and nasal fractures: classification, clinical signs, treatment.	2
8.	Temporary (transport) immobilization of the facial bones fractures: types, requirements.	2
9.	Prolonged (treatment) jaws splint immobilization. Wiring techniques, methods of intermaxillary fixation. Dental, dentogingival and gingival splints. Advantages and	2

	disadvantages.	
10.	A notion about internal fixation. Osteosynthesis techniques. Indications, contraindications, surgical methods, complications. External hardware fixation of facial bone fragments.	2
11.	Types of bone regeneration, primary and secondary bone healing.	2
12.	Combined injures of maxillofacial area: clinical features, diagnostics, treatment.	2
13.	Early general and local complications of maxillofacial injures (bleeding, asphyxia, shock). Late complications of maxillofacial injures. Clinical signs, diagnostics, treatment.	2
14.	Thermal (burns, frostbite), chemical (acids, alkalis, heavy metal salts), physical (electric current) facial injures.	2
15.	Algorithms of the practical skills implementation (primary wound debridement, temporary and prolonged jaws immobilization).	2
Total hours: 30		

Practical lessons schedule for VIII /spring/ semester

№	Topic	Hours
Surgical dentistry of extreme situations and military maxillofacial surgery		
1.	Topic №1. The tasks of military dentistry. The organization of military maxillofacial surgery. The type of medical care in civilian and war time. Principles of the evacuation of the wounded in the maxillofacial area. Military medical doctrine.	2
2.	Topic №2. MFA soft tissues gunshot injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Primary debridment.	2
3.	Topic №3. MFA bones gunshot injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Gunshot osteomyelitis.	2
4.	Topic №4. Soft tissues burns injures: classification, clinical signs, diagnosis, treatment managements, evacuation stages treatment. Complications. Plastic surgy of MFA thermal injures. Face frostbite: classification, clinical signs, diagnosis, treatment managements.	2
5.	Topic №5. Combined injures of MFA. Radiation syndrome: clinical signs, the treatment peculiarities. Nutritional status in with MFA gunshot injures patients. Physiotherapy methods in patients with gunshot injures.	2
Oncology of the maxillofacial area		
1.	Topic №6. Classification of tumours of MFA, etiology, pathogenesis, conformities of growth and development of benign tumours, modern methods of their diagnostics. Principles of management. Cysts of jaws (odontogenic and nonodontogenic, epithelial and non-epithelial): classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, surgical treatment, complications.	2
2.	Topic №7. Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma. epulis: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.	2
3.	Topic №8. Benign nonodontogenic tumors of jaws: osteoblastoma, osteoclastoma, osteoma, hondroma, peripheral giant cell granuloma, haemangioma. fibroma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.	2
4.	Topic №9. Benign fibrous lesions of the jaws: fibrous dysplasia, cement osseous dysplasia. parathyreoid osteodystrophia. Paget disease, cherubism, eosinophilic, granuloma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.	2
5.	Topic №10. Benign soft tissues tumours of the maxillofacial area (skin, fat, connective, muscle and nerve tissues tumors, tumors of blood and lymphatic vessels): classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications. MFA tumor-like lesion: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications, prevention.	2
6.	Topic №11. Precancer skin and mucosal lesions of the face, oral cavity and tongue: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics,	2

	treatment, complications.	
7.	Topic №12. Malignant soft tissue tumors of the maxillofacial area: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, surgical treatment, radio- and chemotherapy, complications.	2
8.	Topic №13. Carcinoma and sarcoma: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.	2
9.	Topic №14. Benign tumors and cysts of the salivary glands: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications. Malignant tumors of the salivary glands: classification, etiology, pathogenesis, histological structure, clinical signs, diagnostics, treatment, complications.	2
10.	Topic №15. Algorithms of the practical skills implementation Summary lesson	2
Total 30 hours		

7. Laboratory lessons schedule – not provided during discipline studying

8. Independent work schedule for VII /autumn/ semester

№ #№	Topic	Hours	Type of control
1.	The modern diagnostic methods of maxillofacial injures.	4	Current control on the practical classes
2.	Surgical treatment of soft tissues injuries, types of sutures.	4,5	Current control on the practical classes
3.	Types of the jaws fractures healing. Methods of influence on osteoreparative processes.	4,5	Current control on the practical classes
4.	Clinical signs, peculiarities of treatment and prognosis of maxillofacial fractures in patients with concomitant diseases (HIV/AIDS, thyroid disease, drug users). Protocols of care.	4.5	Current control on the practical classes
5.	Osteosynthesis of the facial bones: techniques, biological principles of bone regeneration.	6	Current control on the practical classes
6.	Clinical signs, diagnostics, treatment of frontal-facial and craniofacial trauma.	6	Current control on the practical classes
7.	The modern diagnostic methods and complications of craniofacial injures.	4,5	Current control on the practical classes
8.	Distraction and compression treatment methods of maxillofacial fractures.	5	Current control on the practical classes
Total hours: 39			

Independent work schedule for VIII /spring/ semester

№	Topic	Hours	Type of Control
Surgical dentistry of extreme situations and military maxillofacial surgery			
1.	Traumatic and painful shock emergency medical care.	2	Current control on the practical classes
2.	Neck and face vessels trauma emergency medical care.	2	Current control on the practical classes
3.	Asphyxia. Types of asphyxia. Emergency medical care in different type of asphyxia.	2	Current control on the practical classes
4.	The syndrome of prolonged tissues compression and neurological post traumatic changes contemporary treatment (extracorporeal hemosorbtion, plazmaferesis etc.).	2	Current control on the practical classes
Oncology of the maxillofacial area			
5.	Oncogenesis. Current views on biological bases of oncogenesis.	2	Current control on the practical classes
6.	Biological principles of MFA benign and malignant	2	Current control on the practical

	tumors treatment.		classes
7.	The immune system in patients with MFA tumors and tumor like lesions.	2	Current control on the practical classes
8.	The examination methods in patients with MFA tumors and tumor like lesions. Biopsy methods.	2	Current control on the practical classes
9.	Differential diagnosis of benign and malignant processes.	2	Current control on the practical classes
10.	Differential diagnosis of MFA ulcers.	2	Current control on the practical classes
11.	The contemporary methods of the MFA hemangiomas treatment.	2	Current control on the practical classes
12.	The methods of MFA lymphadenopathies diagnosis and treatment.	2	Current control on the practical classes
13.	The methods of the soft tissues malignant tumors management.	2	Current control on the practical classes
14.	The methods of the bone malignant tumors management. Methods of the bone defects grafting after MFA tumors excision.	2	Current control on the practical classes
Total hours: 28			

9. Individual tasks - are not included into the curriculum.

10. Tasks for independent work

Independent work of students includes:

– abstracts of theoretical material, solution of situational tasks, control questions on relevant subjects of independent work, etc.;

- creation of multimedia presentations on selected topics of independent work;

- creation of poster presentations on selected topics of independent work;

- writing a medical history according to selected nosologies;

– preparation for classroom classes (practical);

- performance of tasks in the academic discipline during the semester;

- work on individual topics of academic disciplines, which, according to the working curriculum of the discipline, are assigned to students for independent study;

– preparation for all types of control works;

- work in student scientific circles and centers, etc.;

- participation in the work of "round tables", etc.;

– participation in scientific and scientific-practical conferences, Olympiads, etc.;

In order to organize independent work at the department of surgical stomatology and maxillofacial surgery, the teachers conduct the following activities:

- group and individual consultations;

– interviews with students;

- systematic control over students' performance of tasks recommended for independent study;

- providing students with means for self-control (tests, packages of control questions and situational problems);

- analysis and evaluation of the student's work.

11. Teaching methods.

The educational process at the Department of Surgical Dentistry and Maxillofacial Surgery is organized according to the following normative documents:

- Law of Ukraine "On Higher Education" of 01.07.2014 №1556-VII;

- Decree of the Cabinet of Ministers of Ukraine dated 29.04.2015 №266 "On approval of the list of branches of knowledge and specialties under which the training for higher education is carried out";

- the Order of the Ministry of Education and Science of Ukraine No. 1151 dated 06.01. 2015 "On the peculiarities of introduction of a list of branches of knowledge and specialties, under which the training for higher education is carried out; approved by the Resolution of the Cabinet of Ministers of Ukraine dated 29.04. 2015 №266";

- Order of the rector of the LNMU named after Danylo Halytsky dated 02.06.2016 № 1604 "On approval of curricula";

- the provision on the organization of the educational process at the Lviv National Medical University named after Danylo Halytsky, approved by the Academic Council of the Danylo Halytsky LNMU on 23.06.2021, Minutes No. 3-VR;

- the provision on criteria, regulations and evaluation of results of the educational process at the Lviv National Medical University named after Danylo Halytsky, approved by the Academic Council of the Danylo Halytsky LNMU on 21.02.2018, Minutes No. 1-VR;

- Education-professional curriculum "Dentistry", second (masters) level of higher education, 221 dentistry, MES Ukraine Certificate №1497026 valid until 01.07.2025;

- the provision on the curriculum of the discipline and methodological recommendations for it, CMC Danylo Halytsky LNMU 23.04.2015, Minutes №2;

- the curriculum of the discipline "surgical dentistry" for students of the III, IV and V years of the dental faculty.

Practical clinical sessions in the course of surgical dentistry and MFS are conducted in the groups of 13-15 people. The evaluation of initial level of knowledge of a student who is enrolled for studies at the Department of Surgical Dentistry involves assessment of the level of knowledge in anatomy, general and special physiology, pathological anatomy and physiology on the basis of fundamental training in the departments of the medical-biological and general clinical profiles.

At lectures and practical classes, the teachers cover the achievements of scientific and technological progress, medicine, in particular, surgical dentistry and MFS and their implementation into practice.

The lecture courses cover the main and most complex sections of surgical dentistry and MFS, including the problems of the interrelation of all sections of dentistry with the general pathology, ecology, etiology and pathogenesis of various dental and somatic diseases, nosological diagnostics, surgical and conservative treatment, prevention, social rehabilitation and expertise.

In order to master the manual skills of providing surgical dental care, along with the study of theoretical issues, students work out manipulations on phantoms and headforms; under supervision of the teacher they independently carry out examination of patients with different pathological processes of MFA that fall within the competence of surgical dentistry and MFS, independently study symptoms of surgical dental diseases, acquire skills in the diagnosis of maxillofacial disorders and diseases, their treatment, expertise and working rehabilitation.

Methodology of educational process in practical lesson on surgical dentistry:

1. Preparatory stage, 20 min.

The teacher provides the rationale for the meaning of the lesson for further study of the discipline and professional activities of the physician with the aim of motivating students for further educational activities. Students get acquainted with specific goals and plan of the lesson.

The procedure of standardized control of the initial level of student, discussion and answers to students' questions.

2. The main stage, 40 min.

Students collect history and conduct an examination of the thematic patient. Students prepare a patient check-up plan, additional research methods, fill in the relevant medical documentation, work out techniques for conducting diagnostic manipulations and therapeutic measures, and train the practical skills relevant to the subject of the lesson.

3. Final stage, 30 min.

The procedure of standardized final control test using individual test tasks and questions (10-15 min.), checking the work (5-10 min.). Assessment by the teacher of student's activity during the class, taking into account standardized final control test, analysis of student's progress, announcing the evaluation of each student's activity, and displaying it in the register of student attendance and progress.

The group monitor, at the same time, fills in the assessment and attendance register for students, the teacher verifies it with their signature.

The students are provided with brief overview of the topic of the next lesson and the methodical preparation for it.

The students have the opportunity to get acquainted with the list of practical skills they are to master on the third year. The descriptions of practical skills are placed on educational-methodical stands and on the department's website. The department has developed a form of control over the acquisition of practical skills, which is distributed among students at the beginning of the semester. During the practical classes, as well as at the end of the semester, the teacher marks the progress of the students' acquisition of listed practical skills.

Independent work of students is reflected in the educational-thematic plans, as well as in the methodical development of practical classes for students. Students have the opportunity to get acquainted with the basic and additional literature on discipline, to prepare orally, and also to write abstracts, etc.

The make-up sessions for practical (seminar) classes are carried out by the appointed teachers (on shift basis) as well as on an individual schedule. Schedules for the make-up sessions are available on the appropriate stands and the information website of the department. Students who have missed more than two practical classes are admitted to study with the permission of the Dean's Office of the Faculty of Dentistry, and also must make up for missed classes within the following two weeks. Control of the make-up classes is carried out in the special register with the sequential numbering and fixing the date of make-up session and the date of the missed class which corresponds to the schedule. All missed lectures are recorded in the registers, controlled at practical classes in the form of oral and written interviews, as well as taken into account at the time of credits and exam assessment.

All classes and lectures are provided with appropriate methodical and illustrated material. Classes are conducted in accordance with the traditional methodology, with the use of test tasks, control assignments, oral answers etc. Phantoms and headform are also used extensively during the classes.

Innovative methods and technologies used in the educational process

Discipline	Educational technologies and innovative teaching methods
Surgical dentistry	<ul style="list-style-type: none"> - involvement of students into work with well-known medical databases (ScienceDirect, PubMed, Panteleimon, etc.); -interdisciplinary approach to the study of surgical dentistry - a constant emphasis on the interconnections between basic medical disciplines and related dental specialties; - Involvement of students in assisting with surgical interventions, online video broadcasting of surgical procedures with the simultaneous discussions and comments of the manipulations; - regular hospital rounds with students, examination of thematic patients and discussion of clinical cases, motivation of students to compile algorithms of diagnostic and treatment measures for different dental surgical pathology.

12. Assessment criteria of the discipline

Assessment procedures are an important element of feedback in educational process. They determine whether the level of knowledge and skills obtained by the students is in line with the requirements of regulatory acts pertaining to higher education.

Forms of assessment and grading system correspond to discipline syllabus requirements and the Regulation on Educational Process Organization at Danylo Halytskyi Lviv National Medical University approved by the Scientific Council of Danylo Halytskyi Lviv National Medical University on February 21, 2018, protocol No. 1-BP.

Forms of assessment include routine assessment, final assessment – exam.

Routine assessment is conducted during practical classes and is aimed at checking students' level of preparation for doing specific tasks.

At the start of a new course an initial test is conducted in order to check students' knowledge in disciplines making up the course. The initial test is conducted during first class using the tasks corresponding to the syllabus of previous discipline. Test results are analyzed during department (inter-department) meetings and sessions of methodological committees with participation of academic staff who teach the discipline. Initial test results are used for development of student individual assistance means and academic process correction.

Routine assessment is conducted on the basis of comprehensive evaluation of student's activities, including assessment of initial level of knowledge, quality of practical work done, level of theoretical training and final level of knowledge. Forms of routine assessment – tests tasks, situational problems, recitation, structured written task and practical skills assessment under conditions approximating real.

Final control - exam - is a form of final control, which consists in evaluating the student's assimilation of educational material. It is conducted in accordance with the curriculum in the terms established by the schedule of the educational process and in the amount of educational material determined by the program of the academic discipline.

The evaluation of the discipline "Surgical Dentistry", represented by three content modules, is a rating and is defined as the sum of the evaluations of the current educational activity and the passing of the exam (in points), which is given when evaluating theoretical knowledge and practical skills in accordance with the lists determined by the program of the discipline.

Current control.

Assessment of student current progress is made during each practical class according to a 4-point scale and is recorded in academic performance journal. At the end of practical classes average point is transferred into 120-point scale.

Student knowledge is assessed both from theoretical and practical perspective under the following criteria:

- **"excellent"** – a student has perfectly mastered the theoretical material, demonstrates profound and comprehensive knowledge of a relevant topic or discipline as well as the main ideas of scientific sources and recommended literature; thinks logically and gives a logically built answer; freely uses theoretical knowledge gained during analysis of practical material; expresses attitude towards various problems; demonstrates a high level of practical skills;
- **"good"** – a student has mastered theoretical material well, is aware of the main theoretical principles discussed in scientific sources and recommended literature and is capable of substantiating them; has practical skills and expresses opinion on this or that issue yet may be inaccurate and erroneous when presenting theoretical material or analyzing the practical material;
- **"satisfactory"** – a student has generally mastered theoretical material on the topic or discipline, is aware of the scientific sources and recommended literature, yet is uncertain when answering and additional questions cause him/her to give an unclear answer or no answer at all; when answering practical questions a student demonstrate inaccuracies, is not capable of evaluating facts and phenomena and linking them to future activities;
- **"unsatisfactory"** – a student has not mastered the material of the topic (discipline); has no knowledge of scientific facts and definition; is hardly aware of the scientific sources and recommended literature; he/she lacks academic thinking, practical skills have not been formed.

Evaluation criteria by types of control:

Evaluation criteria of the test task

"excellent" - the student solved 95-100% of the proposed set of test tasks;

"good" - the student solved 80-94% of the proposed set of test tasks;

"satisfactory" - the student solved 60.5-79% of the proposed set of test tasks; **"unsatisfactory"** - the student solved less than 60.5% of the proposed set of test tasks. Evaluation criteria of a package of open questions.

The assignment includes 5 open-ended questions on the topic of the practical session. The value of each separate question is 1 point, or 20%. The results of the answers are summed up and a score is given on a five-point scale: 5 "excellent" - 4.5-5 points; 4 "good" - 3.5-4 points; 3 "satisfactory" - 3 points; 2 "unsatisfactory" - 2 or less points.

Each of the questions is evaluated according to the following criteria:

1 point – the student flawlessly mastered the theoretical material of the lesson topic; answered the questions independently, competently and consistently with exhaustive completeness; demonstrates deep and comprehensive knowledge, logically constructs an answer, expresses his attitude to certain problems; is able to establish cause-and-effect relationships, logically and reasonably draw conclusions; answers the questions correctly, using the materials presented for independent work.

0.75 points - the student has well mastered the theoretical material of the subject of the lesson, presents it with arguments; discloses the main content of the educational material, gives incomplete definitions of concepts, allows minor violations in the sequence of the presentation of the material and inaccuracies in the use of scientific terms, vaguely formulates conclusions, expresses his thoughts on certain problems, but assumes certain errors in the logic of the presentation of the theoretical content;

0.5 points - the student has mainly mastered the theoretical material of the subject of the lesson, reveals the content of the educational material fragmentarily, shows the initial idea about the subject of study, makes significant mistakes when reproducing the main educational material, gives simple examples, gives unconvincing answers, confuses concepts.

0 points – the student has not mastered the educational material of the topic, does not know the basic definitions and concepts; gives the wrong answer to the question.

Evaluation criteria of the situational problem

"excellent" - the student has deeply mastered the theoretical material of the lesson topic, knows how to connect theory with practice, which allows him to solve situational problems of increased complexity.

"good" - the student has firmly mastered the theoretical material of the lesson topic, correctly applies theoretical knowledge when solving situational problems of medium difficulty.

"satisfactory" - the student has mastered only the basic material without details, solves only the easiest problems, assumes inaccuracies, chooses insufficiently clear wording, violates the sequence in the presentation of the answer.

"unsatisfactory" - the student does not know a significant part of the theoretical material of the lesson topic, makes significant mistakes, does not solve the situational problem.

Criteria for evaluating practical skills

"**excellent**" - the student fully possesses practical skills, knows how to connect theory with practice.

"**good**" - the student partly possesses practical skills, correctly applies theoretical provisions when solving practical tasks.

"**satisfactory**" - the student has only the mandatory minimum performance of the practical task, is familiar with the performance technique.

"**unsatisfactory**" - the student does not have a practical skill.

When using different methods of verification of learning results, their points are added to the arithmetic average.

Independent student work assessment

Material for independent student work foreseen in the topic of practical class together with classroom work is evaluated during routine assessment of the topic in relevant class. Evaluation of topics planned for independent work and not included into topics for classroom work is made during final assessment.

Admitted to final assessment are students who attended all classes foreseen by the syllabus of discipline and who received above the minimum number of points during routine assessment. Students who skipped classes may be allowed to work off missed classes with the permission of dean's office before an established time within the term.

11. During final assessment - exam:

The semester exam allowed students which attended all the provided curriculum of courses for classroom training sessions and took on the current success of marks, not less than minimum - 72 points.

Teachers of the department - associate professors are appointed as examiners according to the order and the approved schedule of the examination session.

Dates, time of the Dental surgery examination and the number of groups that make up the exam in one day, determined exam schedule drawn up by the educational department of the university.

Semester exam in the Oral surgery consists of the following stages:

Stage I - check the presence of students admitted to the assembly semester exam by test-examination information; familiarize students with members of the examination committee and support staff during an examination (assistant, senior assistant), duration of writing the exam, exam form filling rules replies term announcement of exam results.

Stage II - a written response to the format of the tests A. The student receives a test paper containing a package of tests (80 tests format A from the following sections of the Dental Surgery "Oral Surgery Propedeutic", "MFA Inflammatory diseases", "Civil and Military trauma of MFA", "MFA Oncology").

In each variant all the tests are identical, arranged in different sequences of the correct answer and have five distractors. In each task using terms, names, designations are well known for the students.

In each variant, all test tasks are identical, located in a different sequence with a variable location of the correct answer. 40 test questions have only one correct answer; 40 tests - 50% correct answers from the total number of distractors. Each task uses terms, names, and designations known to students.

In test tasks with one answer, if the student chooses the correct answer from the proposed ones, then 1 point is credited for the test. If the student chooses the wrong answer, zero points are given for the test. Choosing several answers in questions from the specified group is considered a violation and is counted as zero points.

In extended choice tasks, the sum of points for all correct answers is 1 point, divided multiple times between all correct distractors.

The sum of points for the exam consists of the sum of points for each individual test task, both with a single answer and with multiple choices. Duration of written student work is 90 minutes.

The performance of the exam tasks must be extremely independent. With the use of illegal sources, additional communication facilities or hints, the student is not allowed to further exam and received a rating of "0" points.

After the answer form filling, the examiner receives written responses, exam tasks and academic records of each student.

Stage III – the exam tasks checked by the examination committee.

Stage IV – paperwork and results announcement (provided the examiner not later, than two days after an examination by the Schedule for the above stated points and evaluation on a national scale).

The evaluation of a student's work results during the semester should be documented (included in the academic journal, test-examination information, academic records of student).

Student's refusal to fulfill examination task is classified as an unsatisfactory mark.

Students are supposed to fulfill their examination tasks independently. The use of forbidden additional materials and communication means or prompts results in student being expelled from the exam with grade “0”.

Upon termination of exam the examiner collects written answers from each student together with exam cards and student credit books. Assessment results are recorded in grade report sheets.

A positive grade is recorded in student’s credit book. The examiner announces exam results and gives out credit books with indication of points and grade according to national scale no later than two days after the scheduled date of exam.

A student who does not agree with the grade may file a written appeal with the head of department on the day of grade announcement indicating specific reasons for disagreeing with the grade.

Head of department together with examiner and other experts, if necessary, consider an appeal within 3 days and orally inform the student of the results.

Checked exam papers are kept for three months and then destroyed.

14. Scheme of calculation and distribution of points received by students:

The following evaluation scales are used in the educational process of the University: multi-point (200-point) scale, traditional 4-point scale and ECTS rating scale. Results are converted from one scale to another according to the rules below.

Maximum number of points a student can get for current academic progress during term to be allowed to take an exam is 120 points.

Minimum number of points a student must get for current academic progress during term to be allowed to take an exam is 72 points.

Calculation of the number of points is conducted on the basis of grades under traditional grade scale received by the student during the term by determining arithmetic average (AA) rounded off to the nearest hundred. Figure received is then converted into points under multipoint grade scale using the following procedure:

$$x = \frac{AA \times 120}{5}$$

A conversion chart for 200-point scale is presented for convenience purposes:

Fig. 2

Recalculation of average current grade into multipoint scale for disciplines in which an exam is foreseen

4-point scale	200-point scale	4-point scale	200-point scale	4-point scale	200-point scale	4-point scale	200-point scale
5	120	4.45	107	3.91	94	3.37	81
4.95	119	4.41	106	3.87	93	3.33	80
4.91	118	4.37	105	3.83	92	3.29	79
4.87	117	4.33	104	3.79	91	3.25	78
4.83	116	4.29	103	3.74	90	3.2	77
4.79	115	4.25	102	3.7	89	3.16	76
4.75	114	4.2	101	3.66	88	3.12	75
4.7	113	4.16	100	3.62	87	3.08	74
4.66	112	4.12	99	3.58	86	3.04	73
4.62	111	4.08	98	3.54	85	3	72
4.58	110	4.04	97	3.49	84	Less than 3	Not enough
4.54	109	3.99	96	3.45	83		
4.5	108	3.95	95	3.41	82		

Maximum number of points a student can get when passing the exam is 80.

Minimum number of points when taking the exam – at least 50.

Grade in discipline for which an exam is foreseen is calculated as a sum of points for current academic progress (at least 72) and points received during exam (at least 50).

Grades in discipline for students who successfully completed the course are converted into traditional 4-point scale according to absolute criteria provided below:

Fig. 3

Grade in discipline	Grade under 4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points up to the minimum number of points to be received by a student	3
Below the minimum number of points to be received by a student	2

ECTS grade is not converted into traditional scale since ECTS scale and four-point scale are independent.

Objectivity of assessment is checked by means of statistical methods (correlation ratio between ECTS grade and grade under national scale).

Grades of students with the same academic major are ranked with consideration for points received in discipline in the following way:

Fig. 4

ECTS grade	Statistical index
A	Top 10 % students
B	The next 25 % students
C	The next 30 % students
D	The next 25 % students
E	The last 10 % students

Ranking with assignment of grades „A”, „B”, „C”, „D”, „E” is conducted for students of the same year with the same academic major who successfully completed the course. Students who received FX, F grade (“2”) are not included into the list of students who are ranked. Students who received an FX grade upon retake automatically receive „E” grade.

An FX grade (unsatisfactory with possibility of retake) is given to students who got minimum points for current academic progress, were allowed to pass the exam but failed it. This category of students has the right to retake the exam within additional time for elimination of academic failure established by the schedule of educational process.

An F grade (unsatisfactory with compulsory repeat course) is given to students who attended all classes in discipline but got minimum points for current academic progress and were not allowed to take the exam. A student receiving an F grade is obliged to retake the course.

Exam retake is allowed no more than twice – the first retake exam is passed in the presence of examiner appointed by the head of department, the second retake exam is passed in the presence of a board set up by the dean of faculty. Students who failed to appear to the exam without a valid reason shall be deemed as those who have received an unsatisfactory mark.

15. Methodological support:

- notes, thematic plans of practical classes, independent work, lists of questions, tasks and cases for current, final and self-monitoring of students' knowledge and skills, lists and algorithms for performing practical skills;
- methodological guides for students of the 3rd year of the Faculty of Dentistry for practical classes in surgical dentistry;
- methodological guides for teachers of the 3rd year of the Faculty of Dentistry for practical classes in surgical dentistry;
- methodological guides for students of the 3rd year of the Faculty of Dentistry for independent work in surgical dentistry;
- videopresentations;

With the help of sponsorship was created and established the use of a local computer network and modern video equipment, which provides online broadcasting of surgical interventions in classrooms/ This allows students to "virtually" be present in the operating room, discuss with teachers and surgeons interventions or other surgical manipulations, etc. Based on the video footage of surgical interventions, a video library was created for demonstration during the relevant thematic classes. The video library of the department also

contains advertising films with the products of Septodont (France), Kolapan (Russia), Conmet (Russia), Geistlich (Switzerland), Synthes (Switzerland), Ihde Dental (Switzerland), "BTI" (Spain), etc., the demonstration of which expands students' imagination about modern technologies in surgical dental practice. Due to the cooperation with the Center for Medical 3D Diagnostics (Lviv), the use of the program for decoding radiographs and computer tomograms "Point Nix" (Korea) was introduced into the educational process, which will allow students to better navigate the issues of radiological diagnostics of various surgical dental pathologies. Employees of the department created and implemented in the educational process author's computer programs for diagnostics and planning of cystectomy operations and atypical removal of lower third molars "RTG ruler" and "Xray analyzer" for which received patents of Ukraine for inventions and acts of implementation in practical medicine.

A phantom class of the Department of Surgical Dentistry and MFS has been created, which is equipped with modern computer and video stuff for demonstration of live-surgery and thematic films. To demonstrate and practically master the skills of local anesthesia in the maxillofacial area and tooth extraction, the phantom class is equipped with phantoms of the head with replaceable jaw modules (4 pcs.), Models of skulls and jaws (6 pcs.), Sets of tools for tooth extraction, performing surgical interventions in the maxillofacial area.

To demonstrate and implement practical skills of treatment of traumatic injuries of MFA, the phantom class is equipped with tools and models for performing the technique of mono- and intermaxillary splinting, osteosynthesis of facial bones (3 models of the skull with imitation fractures of the upper jaw and NOE complex models with imitation of mandibular angle fractures, 45 models with imitation of mandibular symphysis fractures, 40 models with imitation of mandibular fractures of the mandible, 3 holders for fixing models to the work surface, Synbone, Switzerland).

In 2018, the department received a full-fledged resuscitation simulator with a control device (ONICO) for visualization and practice of emergency care skills.

Practical classes on "Surgical Dentistry" are provided with methodical and illustrative material, respectively. Visualization of practical skills algorithms is provided with video presentations.

List of practical skills for the content module 1 "Traumatology of MFA":

1. Make a plan for the examination of a patient with damage of MFA.
2. To work on the phantom technique of primary surgical debridement (PSD) of the wound.
3. To work out the technique of temporary stopping of bleeding.
4. To master the technique of examination of the patient with fracture of the mandible.
5. To learn the technique of palpation of the mandible in a patient with suspected traumatic fracture of the mandible.
6. Learn how to interpret radiographs.
7. Learn how to plan a medicament treatment plan.
8. To master the technique of clinical examination of a patient with fractures of the upper jaw.
9. Learn how to identify characteristic clinical symptoms in patients with upper jaw fractures.
10. Assign additional research methods.
11. Correctly interpret the results of instrumental research methods.
12. Learn how to plan a comprehensive treatment plan, depending on the complexity of the case.
13. To master the basic methods of examination of the patient with fracture of the zygomatic bone, arch and bones of the nose in peacetime.
14. To carry out or to appoint additional methods of examination of the patient with fracture of the zygomatic bone, arch and bones of the nose in peacetime.
15. To make a plan of treatment of the patient with fracture of the zygomatic bone, arch and bones of the nose in peacetime.
16. Master the skills of making and imposing temporary transport bandages.
17. Master the skills of ligature fixation of teeth.
18. Master the skills of imposing standard and individual arch bars.
19. To master the technique of bone suture.
20. To master the technique of imposing miniplates on bone fragments.
21. Describe a check radiograph for the correct reposition and fixation of fragments.
22. Learn how to identify characteristic clinical symptoms that indicate impaired regeneration.
23. Learn to recognize on radiographs signs of impaired reparative regeneration.
24. To prescribe comprehensive medical treatment aimed to improve reparative osteogenesis.
25. To master the method of examination of a patient with gunshot injury of the bones of the face.
26. To make a plan of examination of the patient with traumatic disease.
27. Make a plan for medicament treatment of traumatic shock.
28. Examine the patient with complications of traumatic injuries of the maxillofacial area.
29. To stop bleeding, by ligation of the vessel.

30. Write a scheme of treatment of the patient with slow consolidation of fragments.
31. Examine the patient with burns of maxillofacial area.
32. Calculate the area of tissue damage.
33. Make up a scheme of treatment of the patient with burns of the maxillofacial area.
34. Make a plan of examination of the patient with combined injury.
35. Make up a scheme of priority of medical care for patients with combined injuries.
36. Draw the schemes of the incision of feeding tubes.
37. Make up a plan of care for seriously injured patients.

List of practical skills for the content module №2 and №3 "Surgical dentistry of extreme situations and military maxillofacial surgery" "Oncology of the MFA":

1. To make up a plan of organization of rendering of medical aid to maxillofacial wounded at the stages of medical evacuation.
2. To make a plan of complex treatment of patients with gunshot injuries.
3. To be able to collect anamnesis and to examine patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
4. To be able to make a plan of examination of patients with benign and malignant tumors of the maxillofacial area, tumorous formations.
5. Be able to make plan of diagnosis and interpret additional examination methods in patients with neoplastic neoplasms of soft tissues of the MFA.
6. Be able to carry out a diagnostic puncture.
7. Be able to perform an incisional biopsy.
8. Be able to perform excision biopsy.
9. Be able to identify indications and contraindications to surgical treatment of benign and malignant tumors, tumors and precancerous diseases of the MFA.
10. Be able to make up a plan and volume of medical therapy for patients with benign and malignant tumors of the maxillofacial area and tumor-like lesions.
11. Be able to make up a plan and volume of postoperative medicament therapy.
12. Be able to carry out diathermocoagulation and cryodestruction.
13. Be able to diagnose complications that may arise after surgical treatment of benign and malignant tumors, tumor-like lesions of the MFA.
14. Be able to make a plan of complex treatment of patients with malignant diseases of MFA.

The list of questions for self-control to the content module 1 "Traumatology of MFA":

1. Basic provisions of the military medical doctrine.
2. First aid to the injured in the maxillofacial area.
3. Pre-medical care.
4. First aid.
5. Qualified medical care.
6. Specialized medical care.
7. Classification of soft tissue injuries of peacetime and wartime.
8. Contusions of soft tissues of the face - clinic, diagnostics, first aid.
9. Abrasions and wounds of soft tissues of the face (slaughtered, torn, cut, chipped, chopped, bitten, crushed, scalped) - clinic, diagnostics, first aid.
10. Features of a clinical picture of wounds of soft tissues depending on their localization.
11. Basic principles of conducting PSD of wounds on the face.
12. Characteristic features of soft tissues of the face that affect the processes of wound healing.
13. Medicinal methods of treatment of wounds in the postoperative period.
14. Physiotherapeutic methods of treatment of wounds.
15. Types of sutures and suture material. Plate seams: purpose and modifications.
16. Plastic surgery in the treatment of facial wounds.
17. Methods of immobilization of facial skull bones.
18. Methods of temporary immobilization.
19. Choice of methods of fixation of the fragments.
20. Implications and contraindications for ligature fixation of teeth and jaws.
21. Technique for ligature bonding of teeth and jaws (by Ivy, Limberg, Gotzko, etc.).
22. Types of permanent immobilization in fractures of the bones of the facial skull.
23. Types of tires used for permanent immobilization in fractures of the jaws.
24. Types and methods of osteosynthesis of facial skull bones.
25. Indications for osteosynthesis of facial skull bones.

26. Preparation of the patient for osteosynthesis.
27. Apparatus methods of osteosynthesis.
28. Classification of fractures of the mandible.
29. Clinical picture of fractures of the mandible.
30. Methods of diagnosis of fractures of the mandible.
31. Temporary immobilization of fractures of the mandible.
32. Conservative (orthopedic) methods of permanent immobilization in the treatment of non-gunshot fractures of the mandible.
33. Surgical orthopedic methods of permanent immobilization in the treatment of non-gunshot fractures of the mandible.
34. Surgical methods of treatment of damage to the upper jaw.
35. Classification of fractures of the upper jaw.
36. Clinic of non-gunshot fractures of the upper jaw.
37. Diagnosis of non-gunshot fractures of the upper jaw.
38. Methods of temporary immobilization in the treatment of non-gunshot fractures of the upper jaw.
39. Conservative (orthopedic) methods of permanent immobilization in the treatment of non-gunshot fractures of the upper jaw.
40. Surgical orthopedic methods of permanent immobilization in the treatment of non-gunshot fractures of the upper jaw.
41. Surgical methods of treatment of injuries of the upper jaw.
42. Topographic and anatomical features of the middle area of the face.
43. Statistics and classification of fractures of the nasal, zygomatic bone and arch.
44. Nasal fractures, clinic, diagnosis, treatment.
45. Fractures of the zygomatic arch, clinic, diagnosis, treatment. Conservative and surgical treatment.
46. Features of the postoperative period in traumatic patients. Possible complications.
47. Mesenchymal osteogenesis.
48. Cartilage osteogenesis.
49. Factors affecting osteogenesis and regeneration.
50. Types of bone tissue regeneration.
51. Stages of reparative regeneration.
52. Causes of impaired reparative regeneration.
53. Methods of optimization of reparative regeneration.
54. Methods for restoring the integrity of the facial skeletal bones and post-traumatic defects. Osteoplastic surgery.
55. Features of rehabilitation of patients with injuries of the maxillofacial area. Medical Ethics and Deontology.
56. Comprehensive effect of trauma on the body.
57. Traumatic disease, classification of its periods, diagnosis.
58. Clinical manifestations of traumatic disease, especially in the damage of MFA.
59. Complex therapy of traumatic disease, prevention of complications.
60. Traumatic shock, its stages, clinic, diagnosis.
61. Algorithm for providing emergency medical care for traumatic shock, treatment during the stages of medical evacuation.
62. Pre-hospital and hospital care for patients with traumatic shock.
63. Prevention of traumatic shock.
64. "Mutual burden syndrome".
65. Traumatic toxemia (Crash Syndrome), "Position Compression Syndrome", clinical signs, periods of disease, local changes in the area of traumatic tissues, first aid and treatment principles.
66. Classification of complications in injuries of the MFA.
67. Asphyxia: types, prevention measures.
68. Traumatic shock: treatment and prevention measures.
69. Types of bleeding, ways of stopping.
70. Classification of thermal damage.
71. Peculiarities of thermal damage of the MFA.
72. Clinical picture of burns, methods for determining the area of damaged tissue.
73. Treatment of thermal injuries of the MFA, prevention of complications.
74. General principles and types of recurrent surgical interventions of MFA.
75. Burn disease, clinic, diagnosis, principles of care.
76. Definition of "combined injuries".
77. Definition of "war poisonous substances".
78. Definition of "radioactive substances".

79. Classification of combined injuries.
80. Pathogenesis of combined injuries.
81. Variants of clinical course of combined injuries of MFA.
82. Prevention of complications in patients with combined injuries of MFA.
83. The concept of radiation disease.
84. Features of clinical course of radiation disease depending on severity. Features of treatment depending on severity.
85. Organization of nutrition of the injured in the maxillofacial area.
86. Organization of care of the injured in the maxillofacial area.
87. Indications and contraindications to the use of exercise therapy and physiotherapy for the injured in the maxillofacial area.

The list of questions for self-control to the content module №2 and №3 "Surgical dentistry of extreme situations and military maxillofacial surgery" "Oncology of MFA":

1. Subject and tasks of surgical dentistry and maxillofacial surgery of extreme situations.
2. Organization of surgical dental care in the civil care system.
3. Organization of surgical dental care in the Armed Forces of Ukraine in peacetime.
4. Principles of organization of stage-evacuation system of treatment of wounded during military operations.
5. Principles of medical sorting of the wounded with a soft trauma of the soft tissues of the face.
6. Medical care for the wounded at the scene of the injury and during the stages of medical evacuation.
7. Influence of disorders of aesthetics of the face on the psyche of the wounded.
8. Classification of gunshot wounds of the face.
9. Characteristics of gunshot wounds on the face depending on the type of weapon.
10. Features of the course of gunshot injuries, depending on the anatomical and physiological features of the maxillofacial area.
11. Diagnosis of gunshot wounds to the face and determining the severity of the injury.
12. Amount of first aid provided to victims with gunshot injuries.
13. Sequence of medical evacuation measures at mass admission of patients with gunshot wounds of the face.
14. Principles of medical sorting of patients with gunshot injuries.
15. Conservative and surgical methods of treatment of gunshot wounds of the maxillofacial area.
16. Etiological factors that cause the appearance of tumors of the maxillofacial area. Carcinogens.
17. Theories of the emergence of tumors. Phases of carcinogenesis.
18. Classification of tumors of maxillofacial area.
19. Classification and features of benign tumors of maxillofacial area.
20. Comparative characteristics of benign and malignant tumors.
21. Basic methods of diagnostics of tumors of maxillofacial area.
22. Definition of the term "cyst".
23. Classification of cysts of odontogenic and non-odontogenic origin.
24. Etiology, pathogenesis, clinical manifestations and treatment of radicular cysts.
25. Etiology, pathogenesis, clinical manifestations and treatment of follicular cysts.
26. Etiology, pathogenesis, clinical manifestations and treatment of congenital jaw cysts.
27. Types of odontogenic MFA tumors.
28. Etiopathogenesis of odontogenic neoplasms of jaws.
29. Patanatomy of different types of odontogenic tumors.
30. Clinical manifestations of ameloblastoma, diagnosis, difdiagnosis, treatment.
31. Features of clinical manifestations, diagnostics, dif.diagnosis and treatment of odontomas.
32. Clinic, diagnosis, dif.diagnosis and treatment of cementomas.
33. Epulid. Clinic, diagnostics, dif.diagnosis, treatment.
34. Classification of benign tumors of the jaws.
35. Etiopathogenesis of benign tumors of jaws.
36. Features of clinical course of benign tumors of jaws.
37. Methods of diagnosis of benign tumors of jaws.
38. Methods of treatment and rehabilitation of patients with benign tumors of jaws.
39. Principles of prevention of the development of complications in patients with the specified pathology.
40. Etiology and pathogenesis of osteogenic neoplasms of jaws.
41. Basic methods of diagnostics, differential diagnostics.
42. Clinical manifestations at all stages of the clinical course of osteogenic neoplasms of the jaws.
43. Methods of surgical treatment of osteogenic neoplasms of jaws.
44. Complications, causes of their occurrence. Preventive measures to prevent the occurrence of this pathology.
45. Etiopathogenesis of benign soft tissue tumors of the MFA.

46. Classification of soft tissue neoplasms of the MFA.
47. Clinical manifestations, diagnostics, treatment of benign tumors from connective tissue.
48. Clinical manifestations, diagnostics, treatment of benign tumors from adipose tissue.
49. Clinical manifestations, diagnostics, treatment of benign neurogenic tumors and tumors.
50. Principles of prevention of development of complications in patients with benign soft tissue tumors of the MFA.
51. Classification of benign vascular tumors of soft tissue of the MFA.
52. Etiopathogenesis of benign vascular tumors of the soft tissue of the MFA: hemangiomas and lymphangiomas.
53. Clinical manifestations, diagnosis, treatment of hemangiomas.
54. Clinical manifestations, diagnosis, treatment of lymphangiomas.
55. Principles of prevention of the development of complications in patients with vascular soft tissue tumors of the MFA.
56. Pathomorphology of tumor-like lesions.
57. Clinical manifestations, diagnosis, treatment of dermoid and epidermoid cysts.
58. Clinical manifestations, diagnosis, treatment of median cysts and fistulas.
59. Clinical manifestations, diagnosis, treatment of lateral cysts and fistulas of the neck.
60. Differential diagnosis of tumor-like lesions.
61. Principles of treatment of tumor-like lesions.
62. Prevention of complications.
63. Retentional cysts of the small salivary glands.
64. Retentional cysts of sublingual salivary glands (ranulas).
65. Cysts of submandibular salivary gland.
66. Cysts of parotid salivary gland.
67. Oncocytosis.
68. Kuttner's syndrome.
69. Clinic, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumor).
70. Clinic, diagnosis and treatment of adenolymphoma (Wartin's tumor).
71. Clinic, diagnosis and treatment of oxyphilic adenoma (oncocytoma).
72. Clinic, diagnosis and treatment of non-epithelial tumors of the salivary glands.
73. Surgical treatment of benign salivary gland tumors.
74. Etiology, pathogenesis of precancerous lesions.
75. Classifications of precancerous lesions.
76. Morphological and clinical diagnosis of precancerous lesions.
77. Methods of examination of patients with precancerous lesions.
78. Clinic, diagnostics, treatment of precancerous lesions of the skin of the face, mucous membrane of the mouth and tongue.
79. Differential diagnostics of obligatory and optional forms of precancerous lesions.
80. Features of histological structure of precancerous lesions of the skin of the face, mucous membrane of the mouth and tongue.
81. Prevention of precancerous lesions.
82. Dispensary observation of patients with precancerous lesions.
83. Mechanism of tumor cell degeneration and subsequent tumor development.
84. Biological carcinogens.
85. Stages (phases) of carcinogenesis.
86. Mechanism of antitumor resistance of an organism.
87. The role of the immune system in the development of tumors.
88. Cytogenetics of malignant growth.
89. Biological characteristics of tumor tissue.
90. Effect on a malignant tumor cell of ionizing radiation.
91. Effect on malignant tumor cell of cryotherapy.
92. Effect of hyperthermia on malignant tumor cell.
93. Effect on a malignant tumor cell of chemotherapeutic agents.
94. Effect of oxygenation on malignant tumor cell.
95. Effect of ultrasound on malignant tumor cell.
96. Effect of hypoxia on malignant tumor cell.
97. Immunotherapy of patients with malignant tumors.
98. Comprehensive treatment of patients with malignant tumors.
99. Epidemiology, etiopathogenesis of malignant neoplasms of the skin of the face, mucous membrane and organs of the oral cavity.

100. Principles of diagnosis of malignant tumors of the MFA and neck.
101. Clinic, diagnosis and treatment of melanoma.
102. Clinic, diagnosis and treatment of basalioma.
103. Classification of malignant neoplasms of the oral cavity.
104. Clinical picture of malignant neoplasms of the oral cavity.
105. Principles of treatment of malignant neoplasms of the oral cavity.
106. Clinico-morphological classification of salivary gland tumors.
107. Mucoepidermoid salivary gland cancer, clinical manifestations, diagnosis, treatment.
108. Adenocarcinoma and cylinder, clinical manifestations, diagnosis, treatment.
109. Clinic, diagnosis, treatment of salivary gland sarcoma.
110. Precancerous lesions.
111. Epidemiology, etiopathogenesis of malignant neoplasms of jaws.
112. Pathological anatomy of cancer and sarcoma of jaws.
113. Clinical manifestations of cancer (carcinoma) of the upper jaw, diagnosis, treatment.
114. Clinical manifestations of mandible cancer, diagnosis, treatment.
115. Clinic, diagnosis, treatment of upper jaw sarcoma.
116. Clinic, diagnosis, treatment of sarcoma of the mandible.
117. Surgical treatment of malignant tumors of the jaws.

List of the practical skills for the semester exam

1. To be able to collect the anamnesis and carry out a clinical examination of the patient, the right to issue medical history, diagnosis and prescribe treatment.
2. To be able to perform all types of local anesthesia in MFA.
3. To conduct typical tooth extraction.
4. To conduct the operation of atypical tooth extraction.
5. To perform the opening of the periostitis or periodontal abscess.
6. To be able to stop the bleeding after tooth extraction.
7. To establish the diagnosis and treat the patient with alveolitis and alveoloneuritis.
8. To be able to treat the sharp edges of the alveolar pocket.
9. To examine the patient with hematoma, contracture and prescribe treatment.
10. To examine the patient with pericoronitis, to establish diagnosis and conduct treatment (dissection of the mucous membrane, its removal or wisdom teeth extraction).
11. To examine the patient with sinusitis, to establish a diagnosis and prescribe treatment.
12. To establish the diagnosis and to treat the perforation of the maxillary sinus.
13. To be able to conduct the examination, establish the diagnosis of the diseases of the salivary glands.
14. To be able to conduct sonding of the ducts of the salivary glands.
15. To be able to examine a patient with the phlegmon, to establish diagnosis and prescribe treatment.
16. To examine the patient with the tumor to establish the diagnosis and prescribe treatment.
17. To be able to provide a puncture or to take the material for cytological or histological examination.
18. To examine a patient with trauma of maxillofacial area, to establish a diagnosis and prescribe treatment.
19. To be able to perform primary surgical treatment of wounds.
20. To perform a temporary immobilization of fragments of the lower and upper jaws.
21. To be able to provide the correction of dental arch bars, cleaning of the oral cavity.
22. To be able to provide bimaxillary splinting as one of the methods of permanent immobilization.
23. To examine the patient with dislocation of the lower jaw and be able to treat it.
24. To assist the patient with syncope, collapse, shock.
25. To assist a patient with Quincke's edema, anaphylactic shock.
26. To be able to make an artificial respiration and indirect heart massage.

The list of test questions for the semester exam

1. Organization of oral surgical care to the population of Ukraine in the polyclinical and hospital conditions.
2. Stages of development of oral surgery in Ukraine. The contribution of domestic scientists.
3. Asepsis and antisepsis during operations of the maxillofacial area in the polyclinic and hospital.
4. Aseptic and antiseptic aspects of AIDS and viral hepatitis in the polyclinical and hospital practice of oral surgeon.
5. Methods of preparation of the oral surgeons hands for surgery in the polyclinic and hospital.
6. Immunobiological features of tissues of the maxillofacial area. The role of local immunity for odontogenic infections.
7. Examination of a patient in the department of oral surgery of the polyclinic and hospital. Medical

documentation.

8. Pain, its components, leading the way. Role for the organism. The body's response to pain, the operating injury.
9. Medicinal substances for local anesthesia, their chemical composition, mechanism of action. Recipes.
10. The methods for the production, storage and quality assessment of solutions for local anesthesia. Tests on novocaine by I. Lykowsky and chloramine "B" Guzan.
11. The prolongation of local anesthetics. Vasoconstrictor funds. Their dosage. Recipes. Intoxication with adrenaline.
12. Methods of local anesthesia in oral and maxillofacial area. How to perform them.
13. Potential local anesthesia: the principles of sedation, the main ingredients of medicinal substances, which are part of schemes sedation, advantages and disadvantages.
14. Drug preparation (pretreatment) of the patient for surgery on the maxillofacial area in the conditions of polyclinic and hospital. Possible complications of potential local anesthesia.
15. Common complications of local anesthesia. Anaphylactic shock. Resuscitation.
16. Local complications of local anesthesia in oral and maxillofacial area. Their prevention, diagnosis, treatment.
17. Types and features of general anesthesia during operations on the maxillofacial area in the polyclinic and hospital. Indications and contraindications.
18. Pharmacological agents for anesthesia, the mechanism of their action. Neuroleptanalgesia. Indications and contraindications in oral surgery.
19. General and local complications with conduction anesthesia. Prevention. Resuscitation.
20. Indications and contraindications for various types of local and general anesthesia during operations on the maxillofacial area in the conditions of polyclinic and hospital.
21. Central anesthesia during block of II branch of the trigeminal nerve. Zone of innervation, indications, technique. Prevention of complications.
22. Central anesthesia during block of III branch of the trigeminal nerve. The zone of innervation of the indications, technique. Prevention of complications.
23. Anesthesia by the Bershe-Dubov-Uvarov. Indications and methodology.
24. Anesthesia by the Vishnevsky in infratemporal fossa. Tryger-sympathic blockade. Indications. Methodology.
25. Torus anesthesia by the Veisbren. The area of coverage. Indications. The method of conduction. Prevention of complications.
26. Extraorally method of mandibular anesthesia. The area of coverage. Indications. The method of conduction. Prevention of complications.
27. Finger-less way of intraoral mandibular anesthesia. The area of coverage. Indications. The method of conduction. Prevention of complications.
28. Finger method of intraoral mandibular anesthesia. The area of coverage. Indications. The method of conduction. Prevention of complications.
29. Anesthesia of buccal nerve. The types. The area of coverage. The method of conduction. Indications.
30. Mental anesthesia. Zone of action, indications, technique.
31. Infraorbital anesthesia. The area of coverage. Indications. The method of conduction. Possible complications, its prevention and treatment.
32. Tuberal anesthesia. The area of coverage. Indications. The method of conduction. Possible complications, its prevention and treatment.
33. Anesthesia around incisor foramen. The area of coverage. Indications. The method of conduction. Possible complications, its prevention and treatment.
34. Plexual anesthesia. The area of coverage. Indications. The method of conduction. Prevention of complications.
35. Methods of anesthesia for the removal of the lower molars.
36. Methods of anesthesia for sequestrectomy in the mental part of the lower jaw.
37. Methods of anesthesia for the removal of the upper incisors. To prescribe - 2 % solution of novocaine.
38. Methods of anesthesia for the removal of the upper premolars.
39. Methods of anesthesia for the surgical treatment of superficial phlegmon of MFA.
40. Methods of anesthesia for the surgical treatment of a deep phlegmon of MFA and neck.
41. Common complications during and after anesthesia. Prevention, care.
42. Preparation of a dental patient for urgent surgical intervention in the conditions of polyclinic and hospital.
43. Preparation of a dental patient to elective surgery in the conditions of polyclinic and hospital.
44. Local complications during and after the injection of anesthetic. Prevention, treatment.
45. Doctor's tactics in case of wrong injection instead of anesthetic non-injectational solution.
46. Fainting, collapse, shock. Clinic, the aid for dental patient in the conditions of the polyclinic.

47. Local complications during anesthesia in MFA: etiology, pathogenesis, clinical symptoms, aid, prevention.
48. Peculiarities of anesthesia during tooth extractions in patients with myocardial infarction, diabetes mellitus, cardiovascular diseases.
49. Methods of anesthesia for the removal of the salivary stone.
50. Methods of anesthesia for the maxillary sinus sinusotomy.
51. The choice of method of anesthesia in patients with allergic status.
52. Peculiarities of anesthesia in the elderly people.
53. Modern anesthetic agents (anesthetics), equipment: action, advantages and disadvantages.
54. Modern methods of anesthesia during dental operations, the principles of further development of methods of anesthesia.
55. The operation of the tooth extraction. The stages.
56. Features of removal of individual groups of teeth and roots on the upper and lower jaws.
57. Complications of the teeth extraction. Diagnostics, treatment.
58. Instruments for typical and atypical tooth extraction, its purpose, and action.
59. Instruments for the removal of teeth and roots on the upper jaw. The structure and conditions of use.
60. Instruments for the removal of teeth and roots on the lower jaw. The structure and conditions of use.
61. Atypical tooth extraction. Technique. Care of postoperative wound.
62. The species and the healing period postextractive wound.
63. Atypical extraction of teeth with the retention and dystopia. Indications. The method of operation. Alveolectomy. Complications and their treatment.
64. Bleeding after tooth removal: its causes, methods of stopping prophylaxis.
65. Alveolitis: etiology, treatment. Wound care in the postoperative period.
66. Alveolar pain: etiology, clinical course, treatment.
67. Doctor's tactics in case of perforation of the maxillary sinus floor during tooth removal.
68. Doctor's tactics in case of the pushing of a tooth in the maxillary sinus.
69. The specifics of the preparation of the patient with disease of the blood to remove the tooth.
70. Doctor's tactics in case of pushing the tooth into the tissue of the bottom of the oral cavity.
71. A tooth fracture: methods of removal: required instruments.
72. Tooth extraction from a tumor in a patient with hypertension, stroke, myocardial infarction.
73. Tooth extraction from a tumor in a patient with leukemia.
74. Causes of fracture of the jaw during tooth removal. Doctor's tactics.
75. Prevention of aspiration of teeth, fracture and dislocation of the mandible during tooth extraction.
76. Diseases of teeth eruption. Dystopia and retention. Clinic, diagnostics. Indications and methods of removal of teeth.
77. Pericoronitis. Causes, classification, clinic, diagnostics, methods of conservative and surgical treatment.
78. Etiology, pathogenesis and classification of inflammatory processes in the oral and maxillofacial area.
79. Acute periodontitis. Classification, clinic, diagnostics and treatment.
80. Chronic periodontitis. Classification. Clinic, diagnostics.
81. Chronic granulomatous periodontitis, clinic and diagnostics. Types of granulomas, theories of origin of epithelial granulomas.
82. Surgical methods for the treatment of chronic periodontitis. Resection of the root apex. Indications, technique, and possible complications and their prevention.
83. Surgical methods for the treatment of chronic periodontitis. Hemisection, amputation, replantation. Indications. The method of conduction. Possible complications and their prevention.
84. Replantation of the tooth: simultaneous and delayed, indications and contraindications, method of operation, complications. The connection types of the root of the tooth with the alveola.
85. Causes of acute exacerbations of chronic periodontitis pathogenesis. Treatment, prevention of complications.
86. Periostitis of jaw: classification, etiology, pathogenesis, clinical picture, differential diagnosis.
87. Treatment of acute purulent odontogenic periostitis of jaw.
88. Osteomyelitis of the jaws. Etiology, theories of pathogenesis, classification.
89. Odontogenic osteomyelitis of the jaws. The acute phase. Clinic, diagnostics, treatment.
90. Odontogenic osteomyelitis of the jaws. Chronic stage. Clinic, diagnostics. Conservative treatment. Operation sequestrectomy. Indications, timing and technique. Prevention of complications.
91. Peculiarities of the clinical course odontogenic osteomyelitis - lower and upper jaws. Anatomical and topographical features. Complications of osteomyelitis.
92. Differential diagnosis of acute periodontitis, periostitis and osteomyelitis of the jaws.
93. Peculiarities of the clinical course, diagnosis and treatment non-odontogenic acute osteomyelitis of the jaws.
94. Acute hematogenous osteomyelitis of the maxilla: etiology, clinical features, complications and treatment.

95. Actinomycosis of the maxillofacial area: clinical presentation, differential diagnosis, treatment.
96. Syphilis of the maxillofacial area: clinical presentation, differential diagnosis, treatment.
97. Tuberculosis of the maxillofacial area: clinical presentation, differential diagnosis, treatment.
98. Surgical anatomy of cellular spaces of the maxillofacial area. The way of the spread of odontogenic infection.
99. Abscess and phlegmon of the maxillofacial area. Inflammatory clinical signs, principles of diagnosis.
100. Abscess and phlegmon of the maxillofacial area. The principles of complex treatment.
101. Phlegmon of the infratemporal and pterygopalatal fossae. Etiology, pathogenesis, clinic, diagnostics, treatment.
102. Phlegmon of the temporal area. Causes, clinical signs, diagnostics, treatment.
103. Abscesses and phlegmons of the suborbital and zygomatic areas. Causes, clinical signs, diagnostics, treatment.
104. Abscess and phlegmons of the submandibular space. Its surgical anatomy. Causes, clinical signs, diagnostics, treatment.
105. Abscess and phlegmons of the pterygoid cellular space. Surgical anatomy, causes, clinical signs, diagnostics, treatment.
106. Abscess and phlegmons of the masseteric cellular space. Surgical anatomy. Causes, clinical signs, diagnostics, treatment.
107. Abscess and abscess of the parotid-masseteric area. Causes, surgical anatomy, clinical signs, diagnostics, treatment.
108. Abscess and phlegmon of the buccal area. Surgical anatomy, causes. Clinical signs, diagnostics, treatment.
109. Abscess and phlegmon of the retromandibular area. Surgical anatomy, causes, clinical signs, diagnostics, treatment.
110. Abscess and phlegmon of the tongue. Causes, clinical signs, diagnostics, treatment.
111. Cellulitis of bottom of the oral cavity. Surgical anatomy, causes, clinical signs, diagnostics, treatment.
112. Abscess of the mandibular-lingual groove. Surgical anatomy, causes, clinical signs, diagnostics, treatment.
113. Ludwig angina. Surgical anatomy, causes, clinical signs, diagnostics, treatment.
114. Abscess and phlegmon of the parapharyngeal cellular space. Surgical anatomy, causes, clinical signs, diagnostics, treatment.
115. Odontogenic and non-odontogenic phlegmons of MFA: differential diagnosis, clinical findings, treatment, complications.
116. Clinic, topographic anatomy and treatment of the phlegmon of the neck.
117. General treatment of phlegmons of MFA. To write the necessary prescriptions.
118. Odontogenic mediastinitis: etiology, pathogenesis, clinical signs, diagnosis.
119. Differential diagnosis of odontogenic mediastinitis, surgical and medical treatment.
120. Sepsis, toxic shock. Etiology, clinical signs, differential diagnosis, treatment.
121. Thrombophlebitis of veins of the face, thrombosis of the cavernous sinus. Etiology, clinical signs, differential diagnosis, treatment.
122. Odontogenic abscess of the brain, meningitis. Etiology, clinical signs, treatment.
123. Odontogenic sinusitis. Etiology, pathogenesis, classification, clinical signs, diagnostics.
124. Odontogenic sinusitis. Conservative and surgical treatment. Complications and their prevention.
125. Clinic, diagnostics and treatment of arthritis and arthrosis of the temporomandibular joint. To write the necessary prescriptions.
126. Lymphadenitis of the maxillofacial area: classification, clinical signs, differential diagnosis, treatment.
- Furuncle and carbuncle of the maxillofacial area: classification, clinical signs, complications and treatment.
127. Acute inflammation of the salivary glands: classification, clinical signs, treatment.
128. Sialolithiasis: etiology, clinical features, complications and treatment.
129. Pseudoparotitis of Gerzenberg and parotid gland inflammation.
130. Chronic inflammation of the salivary glands: classification, clinical signs, treatment.
131. Systemic diseases of the salivary glands: a disease of Mikulich, Sjogren syndrome.
132. Noma. Etiology, pathogenesis, clinical signs, treatment. Differential diagnosis, complications.
133. Tasks of surgical dentistry of extreme situations.
134. Organization of surgical dental care to the wounded in the maxillofacial area in the Armed forces of Ukraine.
135. Military-medical doctrine.
136. Principles of medical sorting and evacuation of the wounded in the maxillofacial area.
137. The principles of staged medical care. Medical care on the battlefield and on the stages of medical evacuation.
138. The volume and content of medical care to the wounded in the maxillofacial area in peace and wartime.
139. Gunshot injuries of soft tissues of MFA: classification, clinic, diagnostics, principles and methods of

- treatment, staged treatment.
140. Primary surgical treatment of wounds.
 141. Gunshot injuries of bones of the face: classification, diagnosis, clinical features, medical care at stages of medical evacuation.
 142. Gunshot osteomyelitis.
 143. Modern gunshot wound: features, treatment.
 144. Thermal injuries of the face in extreme condition: clinical features, diagnosis, medical aid at the stages of medical evacuation.
 145. Burn disease: clinic, diagnostics, treatment.
 146. Plastic surgery of the thermal damage of the face.
 147. Asphyxia caused by tissue damage: classification, clinical features. Treatment.
 148. Bleeding caused by tissue damage: classification, treatment.
 149. Neck injuries: clinical features and treatment.
 150. Foreign bodies of the maxillofacial area: etiology, clinical flow, ways to remove.
 151. Frostbite of the face: classification, clinical manifestations, diagnosis, treatment.
 152. Combined injuries of MFA.
 153. Radiation disease: clinical manifestations, peculiarities of treatment, the syndrome of mutual aggravation.
 154. Non-firearm injuries of the upper jaw by Le Fort, peculiarities of clinical manifestations, diagnosis, clinical flow, medical care at stages of medical evacuation.
 155. Complications of maxillofacial injuries, their diagnostics. Medical care on the battlefield and on the stages of medical evacuation.
 156. The feeding of the wounded in the maxillofacial region. Types of diets.
 157. Care for the wounded. Exercise therapy and physiotherapy in the treatment of the wounded in the maxillofacial area.
 158. Military-medical examination of the wounded in the MFA.
 159. General characteristics, for diagnosis of traumatic injuries of the face and jaws.
 160. Classification of injuries of the tissues of the maxillofacial area.
 161. X-ray imaging to diagnose damage of bones of the facial skull.
 162. Injuries of the soft tissues of the face: classification, current, features of surgical treatment.
 163. Types of sutures and suture materials. Cosmetic sutures: purpose and modification
 164. Dislocations and fractures of the teeth: classification, clinic, diagnostics, methods of immobilization, treatment.
 165. Dislocations of the mandible: classification, clinic, diagnostics, treatment.
 166. Fractures of the mandible: classification, clinical flow, and diagnostics.
 167. Fractures of the maxilla: classification, clinic, and diagnostics.
 168. Fractures of zygomatic arches and bones: classification, clinic, diagnostics, treatment.
 169. Injuries of the nasal bones: classification, clinic, diagnostics.
 170. Front and rear nose tamponade: indications, technique.
 171. Principles of treatment of fractures of the upper and lower jaws.
 172. Temporary (transport) immobilization at fractures of bones of maxillofacial area, types, principles, requirements.
 173. Tigerstedt's dental arch bars and their modifications.
 174. Laboratory made arch bars and their use in treatment of injuries of the jaws.
 175. Permanent (healing) immobilization of jaws with different arch bars. The advantages and disadvantages.
 176. Osteosynthesis of the mandible: indications, types, methods, equipment, biological and biomechanical principles.
 177. Osteosynthesis of the maxilla: indications, types, methods, equipment, biological and biomechanical principles.
 178. Orthopedic method of treatment of injuries of the jaws, with their defects: types, indications.
 179. The regeneration of bone tissue, types. Methods of optimization of regeneration of bone tissue.
 180. Combined injuries of the jaws: clinical features and treatment.
 181. Early general and local complications of injuries of the maxillofacial area (bleeding, asphyxia, shock). Clinic, diagnostics, treatment.
 182. Late complications and consequences of injuries of the maxillofacial area. Clinic, diagnostics, treatment.
 183. Combined injuries of the maxillofacial area: classification, features of clinical flow, diagnosis of liquorrhea, the principles of treatment.
 184. Traumatic disease.
 185. Burns of the face: classification, peculiarities of the clinical flow, treatment.
 186. Treatment of the results of the facial burns.
 187. Benign soft tissues tumors of maxillofacial area.

188. Atheroma of maxillofacial area: clinical signs, diagnostics, treatment.
189. Lipoma of maxillofacial area: classification, diagnostics, treatment.
190. Haemangioma of maxillofacial area: classification, diagnostics, treatment.
191. Lymphangioma of maxillofacial area: clinical signs, diagnostics, treatment.
192. Parodontal cysts of jaws: clinical signs, diagnostics, treatment.
193. Epithelial cysts: clinical signs, diagnostics, treatment.
194. Radicular cysts of jaws: clinical signs, diagnostics, treatment.
195. Follicular cysts of jaws: clinical signs, diagnostics, treatment.
196. Retromolar cysts of jaws: clinical signs, diagnostics, treatment.
197. Subperiosteal cysts of jaws: clinical signs, diagnostics, treatment.
198. Adamantinoma: clinical signs, diagnostics, treatment.
199. Odontoma: clinical signs, diagnostics, treatment.
198. Cancer of the skin: clinical features, treatment.
199. Lip cancer: clinical course, differential diagnosis, treatment.
200. Cancer of the mucous membranes of the oral cavity: clinical features, differential diagnosis, treatment.
201. Cancer of the tongue: etiology, pathogenesis, differential diagnosis, treatment.
202. Cancer of the salivary glands: clinical flow, differential diagnostics, treatment.
203. Cancer of the mandible: etiology, clinic, treatment.
204. Cancer of the upper jaw, which develops from the upper wall of the maxillary sinus: clinical flow, differential diagnosis, treatment.
205. Cancer of the upper jaw, which develops from the lower wall of the maxillary sinus: clinical flow, differential diagnosis, treatment.
206. Cancer of the upper jaw that develops from the lateral wall of the maxillary sinus: clinical flow, differential diagnosis, treatment.
207. Cancer of the upper jaw that develops from the medial wall of the maxillary sinus: clinical flow, differential diagnosis, treatment.
208. Sarcoma of the jaws and soft tissues of the maxillofacial area.
209. The Cryle operation. Peculiarities and indications.
210. The Wanakh operation. Peculiarities and indications

16. BASIC AND ADDITIONAL LITERATURE

Basic:

1. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V. O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
2. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERY Second Edition, 2004. - 1502 p.
3. Principles of Dental Local Anaesthesia and Teeth Removal / Ya. E. Vares, R. Z. Ogonovsky, Ch. R. Pohranychna – LNMU, 2007. – 63p.
4. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.

Additional:

1. The AIDS booklet. – Boston: WCB McGraw Hill, 1999. – 70 p.
2. Contemporary Oral and Maxillofacial Surgery / J. P. Sapp, L. R. Eversole, G. P. Wysocki – 2nd ed.- St. Louis: Mosby – 2004. – P. 88-90.
3. AIDS – what every student needs to know / S. A. Rathus, S. Boughn. – 2nd ed. – Philadelphia: Harcourt Brace College Publish. – 1994. – 106 p.
4. Oral and Maxillofacial Surgery/ G.O. Kruger – 6th ed. - St. Louis: Mosby Company. – 1984. – P. 9-38.
5. Contemporary Oral and Maxillofacial Surgery / L. J. Peterson, E. Ellis, J. R. Hupp, M.R. Tucker – 3rd ed. – St. Louis: Mosby – Year Book, Inc. – 1998. – P. 69-82.
6. Bauml, Philips R.W., Lund M.R. Textbook of Operative Dentistry. - 3-rd ed.- Philadelphia: Saunders, 1995.- 661p.
7. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. - Kyiv: AUS Medicine Publishing, 2015. - 103 c.
8. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. - Lviv, 2011.
9. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the

english-medium students of the 5th year education at dentistry faculty (autumn semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. - Lviv, 2011.

10. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. - Kyiv: OMF Publishing, 2016, 128 p.

17. Informative sources:

1. Examination technics <https://youtu.be/-AjoqLAE9Gk>
2. Wound healing <https://www.youtube.com/watch?v=zgc11n-Bw00>
3. Primary surgical care <https://youtu.be/bFtm9MCPDVk>
4. Suturing technics <https://www.youtube.com/watch?v=Akyr4z1BS9E>
5. Mandibular dislocation <https://www.youtube.com/watch?v=ECt863r7H-s>
6. CT anatomy of skull <https://www.youtube.com/watch?v=bEnzG4CZYhE>
7. Management of dento-alveolar injuries <https://www.youtube.com/watch?v=-9XtrnxhsWc>
8. Anatomy of mandible <https://www.youtube.com/watch?v=Zils4ojFKnU>
9. Anatomy of maxilla <https://www.youtube.com/watch?v=XYvGILxigAw>
10. Bone fracture anatomy <https://www.youtube.com/watch?v=P5HwYWShBhw>
11. AO Surgical references mandibular fracture management <https://surgeryreference.aofoundation.org/cmft/trauma/mandible>
12. AO Surgical references midface fracture management <https://surgeryreference.aofoundation.org/cmft/trauma/midface>
13. Ivy wiring <https://www.youtube.com/watch?v=ppbLfuOBXkE>
14. Intermaxillary fixation with dental splints https://www.youtube.com/watch?v=SUz1fiOe_qo
15. Intermaxillary fixation with standard splints <https://www.youtube.com/watch?v=RGp46yHoVag&list=PLODWbBfct7nYjK0xg6r1oS1YEXzNVPNFH&index=5>
16. Wiring technic https://youtu.be/q-SOP_MMmws
17. Mandibular angle ORIF <https://www.youtube.com/watch?v=S1hg6U7gy5Q>
18. Mandibular symphysis ORIF <https://www.youtube.com/watch?v=fv2StvjXeqY>
19. Mandible ORIF <https://www.youtube.com/watch?v=cgBnzz9Xa7I>
20. Double fracture ORIF <https://www.youtube.com/watch?v=Hit8s09Cztc>
21. Zygoma fractures management <https://www.youtube.com/watch?v=inVW0DDJnKs>
22. Midface trauma <https://www.youtube.com/watch?v=-mHcEobz1w8>
23. Zygomatic-orbital complex ORIF <https://www.youtube.com/watch?v=hBwWTyikIIo>
24. Compressive ORIF <https://www.youtube.com/watch?v=OmXaEuw2vJ0>
25. Tracheostomy technic <https://www.youtube.com/watch?v=CWTuUI3kRog>
26. Acute radiative disease <https://www.youtube.com/watch?v=deX2Sfj3JmI>
27. ACLS <https://www.youtube.com/watch?v=mHDiAFB6LzI>
28. Biopsy in dentistry <https://www.youtube.com/watch?v=zB08AVntCUc>
29. Odontogenic cysts https://www.youtube.com/watch?v=UPjbNPz_WXs
30. Precancerous lesions <https://www.youtube.com/watch?v=TYzW59l-nXo>
31. Benign tumors of connective tissue <https://www.youtube.com/watch?v=rw7gzh25h9o>
32. Osteoblastoclastoma <https://www.youtube.com/watch?v=fsowXXkeaAk>
33. Osteoid osteoma <https://www.youtube.com/watch?v=i0P39a0x3WQ>
34. Malignant tumors of bone <https://www.youtube.com/watch?v=EHZEbKDgeRU>
35. Malignant tumors of oral mucosa https://www.youtube.com/watch?v=I8XPdNC_Xk8
36. Postresectional jaw reconstruction <https://www.youtube.com/watch?v=ppykKDo8kYs>