

**PRIVATE HIGHER EDUCATIONAL INSTITUTION  
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"  
Department of Dentistry**

**"APPROVED"**

Acting Head of the Department

 Oleksandr BIDA

**WORKING PROGRAM OF EDUCATIONAL DISCIPLINE**

**"Surgical dentistry"**

**LEVEL OF HIGHER EDUCATION** Second (master's) level

**DEGREE OF HIGHER EDUCATION** Master's degree

**BRANCH OF KNOWLEDGE** 22 Healthcare

**SPECIALTY** 221 Dentistry

**COURSE** 4

Reviewed and approved  
at the meeting of the Department of Dentistry  
Protocol No. 1 of "31". 08. 2022

**Kyiv 2022**

Working program of educational discipline "Surgical Stomatology" for the preparation of students of higher education of the second (master's) level of higher education in the specialty 221 Dentistry.

**Developers:** Doctor of Medicine, Professor V.P. Kuts. , assistant Shabranska V.V.

Approved by the Central Methodical Council of the Academy Protocol No. 1 of 31.08 2022

Agreed

First Vice-Rector



Oleksandra SOROKA

## INTRODUCTION

**The working study program was compiled in accordance with the following normative documents** :the Law of Ukraine "On Higher Education" dated 07.1.2014 No. 1556-VII; by the order of the Ministry of Education and Culture of Ukraine of June 24, 2019 No. 879 "On approval of the standard of higher education in specialty 221 "Dentistry" for the second (master's) level of higher education"; the educational and professional program (OPP) of specialist training in specialty 221 "Dentistry" for the second (master's) level of higher education; the curriculum of the academic discipline " Surgical Stomatology ".

**Description of the academic discipline (abstract).** The discipline provides for the study of surgical dentistry according to its main sections: "Propaedeutics of surgical dentistry", "Inflammatory diseases of SCD", "Oncology of SCD", "Traumatology of SCD", "Reconstructive and restorative surgery of SCD", while the emphasis is on the study of etiology, pathogenesis, clinics, diagnostics, emergency treatment and prevention of the main and most common diseases of SCD.

Considerable attention is paid to the formation of students' skills in taking an anamnesis, conducting an examination and differential diagnosis of SLD diseases with various clinical courses and their complications, modern approaches to diagnosis, principles of treatment and prevention based on evidence-based medicine, as well as emergency conditions in surgical practice are studied in practice. stomatology Students take part in the diagnostic and treatment process of outpatients and inpatients under the guidance of assistants and associate professors of the department. Familiarity with treatment and preventive measures, which are most often used in surgical dental practice, is also provided.

The study of the discipline "surgical stomatology" contributes to the formation of a holistic view of the structure and functioning of the organs of the ENT; deepening of theoretical and practical training, acquisition of professional practical skills for independent medical activity.

The structure of the academic discipline	Number of credits, HOURS, 3 of them				Academic year, semester	Type of control
	In total	Auditory		S.S.		
		Lectures (hours)	Practical classes (hours)			
<b>Name of discipline: Surgical stomatology of content modules 2</b>	<b>4 credits / 120 hours</b>	<b>10</b>	<b>70</b>	<b>40</b>	<b>IV course ( VII , VIII semesters)</b>	<b>Exam</b>
<b>by semesters</b>						
<i>Content module 1</i>	<b>2 credits / 60 hours</b>	<b>6</b>	<b>35</b>	<b>19</b>	<b>VII semester</b>	<b>Diff. exam</b>
<i>Content module 2</i>	<b>2 credits / 60 hours</b>	<b>4</b>	<b>35</b>	<b>21</b>	<b>VIII semester</b>	<b>Diff. exam</b>

**The subject of study of the educational discipline is** traumatic damage of SLD and oncological processes of SLD, which belong to the competence of surgical stomatology and maxillofacial surgery, features of their clinical course, basic diagnostic and therapeutic manipulations used in the practice of a dental surgeon.

**Interdisciplinary connections:** therapeutic dentistry, pediatric dentistry, orthopedic dentistry, normal anatomy, histology, normal physiology, pathological physiology, topographic anatomy and operative surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, skin-venereal, nervous diseases, otorhinolaryngology, ophthalmology, emergency medicine.

### 1. The purpose and tasks of the educational discipline

1.1. **The purpose** of teaching the academic discipline "surgical stomatology" is the professional training of a dentist, which involves mastering the theory and practice of all sections of surgical stomatology and the basics of SCLH, starting with the organization of the work of the surgical department of the dental polyclinic and maxillofacial hospital to the provision of urgent care in emergency cases states and in foci of mass damage and qualified surgical dental and reconstructive-restorative care for SLD diseases.

1.2. **The main tasks** of studying the discipline "surgical stomatology" are the ability to conduct an

examination of a surgical dental patient, to diagnose the main symptoms and syndromes of SLD pathologies, to substantiate and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis of the main diseases, detect and identify the manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment in the clinic of surgical dentistry, identify different clinical options and complications of the most common diseases of SCD, know the measures of primary and secondary prevention the most common surgical dental diseases.

As a result of studying the academic discipline, the student must

**know:**

- Peculiarities of the examination of patients with SCD pathology, the participation of related specialists in the examination.
- Methods of examination of patients with maxillofacial trauma. Organizational principles of providing assistance to victims of maxillofacial injuries.
- Principles of deontology and medical ethics in surgical stomatology and ALS
- Basic methods of general and local anesthesia, sedation in the practice of a dental surgeon (indications, contraindications, peculiarities of the procedure).
- Traumatic damage to soft tissues of SCD.
- Methods of surgical treatment of soft wounds.
- Dislocations and fractures of teeth, fracture of the alveolar process, dislocations of the temporomandibular joint (diagnosis, treatment).
- Bone fractures of the facial skeleton. Modern principles of bone fixation.
- Thermal (burns, frostbite), chemical (acids, alkalis, salts of heavy metals), physical (electric current) damage to the face.
- Combined injuries of the maxillofacial area. Clinic, diagnosis, treatment. Traumatic disease.
- Organization of dental care in the Armed Forces of Ukraine.
- Principles of medical triage and staged treatment of the injured in the maxillofacial region.
- General characteristics, clinical course, diagnosis of gunshot wounds, burns, combined lesions of the maxillofacial area.
- Early and late complications of damage to the maxillofacial area. Clinic, diagnosis, treatment.
- Organization of onco-stomatological care.
- Tumors and tumor-like formations of soft tissues and bones of the maxillofacial area.
- Jaw cysts.
- Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma, epulid.
- Benign neodontogenic tumors of the jaws (osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, etc.).
- Osteogenic tumor-like formations of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma).
- Benign tumors of the soft tissues of SCD (skin, fat, connective, muscle, nervous tissue, blood and lymphatic vessels).
- Precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue.
- Malignant tumors of the soft tissues of the cervical spine and neck. Cancer and sarcoma of the jaws.
- Benign tumors and cysts of the salivary glands.

**be able:**

- Collect the anamnesis and conduct an examination of the patient for the indicated pathology of SCD.
- Make a plan and conduct an examination of a patient with a maxillofacial trauma.
- Plan additional research methods and be able to interpret their results.
- Analyze and interpret the results of X-ray examination in the clinic of surgical stomatology and ALS, and based on them establish the appropriate clinical diagnosis.
- Fill out the relevant medical documentation.
- Perform a diagnostic puncture of the pathological focus of SCD.
- Carry out primary surgical treatment of the wound.
- Demonstrate the technique of applying a nodal seam.
- Carry out tooth replantation.
- Carry out temporary immobilization of fragments of the lower and upper jaws.
- Make temporary splints and perform splinting for jaw fractures.
- Carry out ligature binding of the teeth.

- Apply a smooth tire clamp.
- Carry out permanent immobilization of fragments of the lower and upper jaws.
- Carry out double-jaw splinting as one of the methods of permanent immobilization.
- Carry out reduction of the dislocation of the lower jaw.
- Draw up a plan and conduct an examination of a patient with a neoplasm, prescribe additional diagnostic methods.
- Collect material (smears and biopsies) for cytological and pathomorphological studies.
- Establish an oncodiagnosis based on the results of examinations.
- Draw up a treatment plan for a patient with oncological diseases of SCD.
- To draw up a comprehensive treatment plan for patients with the specified pathologies.
- Diagnose local and general complications in the practice of a dental surgeon.
- Perform cardiopulmonary resuscitation (indirect heart massage and artificial respiration) on the phantom.
- To provide assistance in case of emergency conditions in the practice of SHLH according to the relevant algorithms.

## 2. Competencies and learning outcomes.

According to the requirements of the Standard of Higher Education, the discipline "Surgical Dentistry" ensures that students acquire the following competencies:

- Integral (the ability to solve complex tasks and problems in the field of health care in the specialty "Dentistry" in professional activities or in the learning process, which involves conducting research or implementing innovations).

- General (ability to abstract thinking, analysis and synthesis; ability to learn and be modernly trained; ability to apply knowledge in practical situations; skills in using information and communication technologies; ability to search, process and analyze information from various sources; ability to identify, pose and solve the problem; the ability to choose a communication strategy; the ability to work in a team; the skills of interpersonal interaction; the ability to perform safe activities; the ability to evaluate and ensure the quality of the work performed).

- Special (professional, subject) (collecting medical information about the patient; evaluating the results of laboratory and instrumental research; establishing a clinical diagnosis of dental disease; diagnosing emergency conditions; determining the nature and principles of treatment of dental diseases; determining the tactics of managing a dental patient with somatic pathology; performing medical and dental manipulations; treatment of major dental diseases; medical documentation management).

Detailing of competences in the NRK descriptor in the form of the "Competence Matrix":

### Marking

NRK - National Framework of Qualifications;

ZK - general competences;

ZR - general learning results;

SK - special (professional, subject) competences;

SR - special (professional, subject) learning results;

N - normative type of educational activity by specialty;

B - selective educational activity.

### General competencies according to the requirements of the National Qualifications Framework

**(NQF):**

ZK1	Ability to abstract thinking, analysis and synthesis; the ability to learn and be modernly educated.
ZK2	Knowledge and understanding of the subject area and understanding of the profession.
ZKZ	Ability to apply knowledge in practical situations.
ZK4	Ability to communicate in the state language both orally and in writing; the ability to communicate in a second language.
ZK5	Skills in using information and communication technologies.
ZK6	Ability to search, process and analyze information from various sources.
ZK7	Ability to adapt and act in a new situation; ability to work autonomously.
ZK8	Ability to identify, pose and solve problems.
ZK9	Ability to choose a communication strategy.
ZK10	Ability to work in a team.
ZK11	Interpersonal skills.
ZK12	The ability to act on the basis of ethical considerations (motives).
3K13	Skills of performing safe activities.
ZK14	The ability to evaluate and ensure the quality of the work performed.

ZK15	The desire to preserve the environment.
ZK16	The ability to act socially responsibly and civically.

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

SK1	Collection of medical information about the patient's condition.
SK2	Evaluation of the results of laboratory and instrumental research.
SKZ	Establishing a clinical diagnosis of dental disease.
SK4	Diagnosis of emergency conditions.
SK5	Planning and implementation of measures to prevent dental diseases.
SK6	Determination of the nature and principles of treatment of dental diseases.
SK7	Determination of the necessary regime of work and rest, diet in the treatment of dental diseases.
SK8	Determination of the management tactics of a dental patient with somatic pathology.
SK9	Performing medical and dental manipulations.
ecu	Treatment of basic dental diseases.
SK11	Organization of medical evacuation events.
SK12	Determination of tactics and provision of emergency medical assistance.
SK13	Organization and conduct of dental examination of persons subject to dispensary supervision.
SK14	Assessment of the impact of the environment on the state of health of the population (individual, family, population).
SK15	Maintenance of medical documentation.
SK16	Processing of state) social and medical information.

Detailing of competencies in accordance with the NQF descriptors in the form of the "Competence Matrix".

**Matrix of competences**

No	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
<b>General competences</b>					
1.	Ability to abstract thinking, analysis and synthesis; the ability to learn and be modernly educated.	+	+	+	+
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 orally and in writing; the ability to communicate in a second language.	+	+	+	+
5.	Skills in using information and communication technologies.	+	+	+	+
6.	Ability to search, process and analyze information from various sources.	+	+	+	+
7.	Ability to adapt and act in a new situation; ability to work autonomously.	+	+	+	+
8.	Ability to identify, pose and solve problems.	+	+	+	+
9.	Ability to choose a communication strategy.	+	+	+	+
10.	Ability to work in a team.	+	+	+	+
11.	Interpersonal skills.	+	+	+	+
12.	The ability to act on the basis of ethical considerations (motives).	+	+	+	+
13.	Skills of performing safe activities.	+	+	+	+
14.	The ability to evaluate and ensure the quality of the work performed.	+	+	+	+
15.	The desire to preserve the environment.	+	+	+	+
16.	The ability to act socially responsibly and civically.	+	+	+	+
<b>Special (professional, subject) competences</b>					
1.	Collection of medical information about the patient's condition.	+	+	+	+

2.	Evaluation of the results of laboratory and instrumental research.	+			+
3.	Establishing a clinical diagnosis of dental disease.	+	+	+	+
4.	Diagnosis of emergency conditions.	+	+	+	+
5.	Planning and implementation of measures to prevent dental diseases.	+	+	+	+
6.	Determination of the nature and principles of treatment of dental diseases.	+	+	+	+
7.	Determination of the necessary regime of work and rest, diet in the treatment of dental diseases.	+	+	+	
8.	Determination of the management tactics of a dental patient with somatic pathology.	+	+	+	+
9.	Performing medical and dental manipulations.	+	+	+	+
10.	Treatment of basic dental diseases.	+	+	+	+
11.	Organization of medical evacuation measures.	+	+	+	+
12.	Determination of tactics and provision of emergency medical	+	+	+	+
13.	Organization and conduct of dental examination of persons subject to dispensary supervision.	+	+	+	+
14.	Assessment of the impact of the environment on the health of the population (individual, family, population).	+			+
15.	Maintenance of medical documentation.	+	+	+	+
16.	Processing of state, social and medical information.		+	+	+

### **Learning outcomes**

**Integrative final program learning outcomes, the formation of which is facilitated by the educational discipline:**

#### **Normative and variable content of training formulated in terms of learning outcomes**

<b>Learning outcomes in the cognitive sphere.</b>		
SR1	Identify and identify leading clinical symptoms and syndromes; according to standard methods, using the previous data of the patient's history, the data of the patient's examination, knowledge about the person, his organs and systems, establish a probable nosological or syndromic preliminary clinical diagnosis of dental disease.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK11, ZK12, ZK14, ZK16; SK1, SKZ, SK4, SK15.
SR2	Collect information about the patient's general condition, evaluate the patient's psychomotor and physical development, the condition of the maxillofacial organs, based on the results of laboratory and instrumental studies, evaluate information about the diagnosis.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, ZK 13, ZK14, ZK16; CK1, CK2, CKZ, CK4, CK5, CK6, CK7, CK8, CK11, CK12, CK14, CK15.
SRZ	Prescribe and analyze laboratory, functional and/or instrumental examination of a patient with a dental disease for differential diagnosis of diseases.	ZK1, ZK2, ZKZ, ZK4, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK14; SC1, SC2, SC15.
CP4	Determine the final clinical diagnosis, adhering to the relevant ethical and legal norms, by making a reasoned decision and logical analysis of the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis under the control of the head physician in the conditions of a medical institution.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK18, ZK9, ZK10, ZK14, ZK16; ZK1, ZK2, ZKZ, ZK4, ZK15.
CP5	Diagnose emergency conditions under any circumstances (at home, on the street, in a medical facility), in emergency situations, martial law, lack of information, and limited time.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK13, ZK14, ZK15, ZK16; SC1, SC2, SC4, SC15.
SR6	Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK14, ZK15, ZK16; SC1, SC5, SC13, SC14, SC15, SC16.

SR7	Analyze the epidemiological situation and carry out mass and individual, general and local medicinal and non-medicinal measures! prevention of dental diseases.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK8, ZK9, ZK10, ZK11, ZK12, 3K13, ZK14, ZK15, ZK16; SC1, SC5, SC12, SC14, SC15, SC16
SR8	Determine the nature of treatment of dental disease by making a reasoned decision according to existing algorithms and standard schemes.	ZK1, ZK2, ZKZ, ZK5, ZK6, ZK7, ZK8, ZK12, 3 K 13, ZK14, ZK16; SC1, SC6
CP9	To determine the nature, principles of the regime of work, rest and necessary diet in the treatment of dental diseases on the basis of a preliminary or final clinical diagnosis by making a reasoned decision according to existing algorithms and standard schemes.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3K13, ZK15, ZK16; SC1, SC7, SC15.
SR10	Determine the tactics of managing a dental patient with somatic pathology by making a reasoned decision according to existing algorithms and standard schemes.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK10, ZK12, 3 K 13, ZK14, ZK16; SC1, SC7, SC8, SC15
CPU	carry out treatment of basic dental diseases according to existing algorithms and standard schemes under the control of the head physician in the conditions of a medical institution.	ZK1, ZK2, ZKZ, ZK4, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK14, ZK15, ZK16; ZK1, ZK9, ZK10, ZK15
Wednesda	Organize medical evacuation measures among population, military personnel, in emergency situations, including martial law, during the deployed stages of medical evacuation, taking into account the existing system of medical evacuation software	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3K13, ZK14, ZK15, ZK16; SC1, SC11, SC15
SR13	Determine the tactics of providing emergency medical care, using the recommended algorithms, under any circumstances based on the diagnosis of an emergency condition in a limited time.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK14, ZK15, ZK16; SC1, SC12, SC15
SR14	Analyze and evaluate government, social and medical information using standard approaches and computer information technologies.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK8, ZK10, ZK11, 3 K 13, ZK14, ZK15, ZK16; ZK13, ZK15, ZK16
SR15	Assess the impact of the environment on the state of health of the population in the conditions of a medical institution according to standard methods.	ZK1, ZK2, ZKZ, ZK5, ZK6, ZK7, 3 K 10.3 K 11, 3 K 13, ZK14, ZK15, ZK16; SC13, SC14, SC15, SC16
<b>Learning outcomes in the emotional sphere.</b>		
ZR1	To form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK7, ZK8, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK14, ZK15, ZK16; CK1, CK5, CK6, CK7, CK8, CK9, CK10, CK11, CK12, CK13
ZR2	Follow a healthy lifestyle, use self-regulation and self-control techniques.	ZK1, ZK2, ZKZ, ZK5, ZK6, ZK11, ZK12, 3 K 13, ZK15, ZK16; SC5, SC14
RZ	To be aware of and be guided in one's activities by civil rights, freedoms and duties, to raise the general educational cultural level.	ZK4, ZK5, ZK6, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK14, ZK15, ZK16; SC5, SC13, SC14, SC16
ZR4	To comply with the requirements of ethics, bioethics and deontology in their professional activities.	ZK1, ZK2, ZKZ, ZK4, ZK9, ZK10, ZK11, ZK12, 3 K 13, ZK15, ZK16; CK1, CK5, CK7, CK9, CK10, CK11, CK12, CK13, CK14, CK15
ZR5	To organize the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.	ZK1, ZK2, ZKZ, ZK5, ZK9, ZK10, ZK11, ZK12, 3K13, ZK14, ZK15, ZK16; SK1, SK5, SK6, SK9, SKYU, SK11, SK12, SK13, SK14, SK15
<b>Learning outcomes in the psychomotor field.</b>		

SR16	Perform medical manipulations based on preliminary and/or final clinical diagnosis.	ZK1, ZK2, ZKZ, ZK7, ZK9, ZK10, ZK11, 3 K 13.3 K 14, ZK15; SK9, SKYU, SK11, SK12
SR17	Perform medical dental manipulations based on preliminary and/or final clinical diagnosis.	ZK1, ZK2, ZK5, ZK6, ZK8, ZK9, ZK10, zkp, zkiz, ZK14, ZK15; SK9, SKYU, SK11, SK12
SR18	Perform emergency medical care manipulations, using standard schemes, under any circumstances based on the diagnosis of an emergency.	ZK1, ZK2, ZKZ, ZK4, ZK5, ZK6, ZK8, ZK9, ZK10, ZK11, 3 K 13, ZK14, ZK15, ZK16; SK9, SKYU, SK11

- **Learning outcomes for the discipline:** professional training of a dentist, which involves the assimilation of theory and practice issues from the sections "Traumatology of SCD", "Surgical dentistry of extreme conditions and military maxillofacial surgery" and "Oncology of SCD"; the ability to conduct an examination of a surgical dental patient, to diagnose traumatic injuries of soft tissues, teeth and bones of SLD, the main symptoms of tumors and tumor-like formations of SLD, to substantiate and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis, detect and identify the manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment, identify various clinical variants and complications, know the measures of primary and secondary prevention of surgical dental diseases, the study of which is provided for in content modules 1, 2 and 3.

### Content module 1:

**Explain and interpret** the concept of "oncological vigilance" and the principles of the organization of the antitumor service, examination of cancer patients, the role of factors of endo- and exogenous origin in the occurrence of tumors, understand the patterns of growth and development of tumors and tumor-like formations, the principles of their differential diagnosis.

**To treat** the pathogenesis of tumor-like formations of soft tissues and bones of SCD (jaw cysts, soft tissue cysts), benign odontogenic and non-odontogenic tumors of the jaws (ameloblastoma, odontoma, cementoma, epulid, osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma), osteogenic tumor-like formations of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma), benign tumors of soft tissues of SCD, precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue, malignant tumors of soft tissues and bones of the thyroid gland and neck, benign and malignant tumors and salivary gland cysts.

**Analyze** the criteria of benign and malignant tumors, stages of lesions according to the TNM system, understand their tissue composition, the principles of classification of tumors and tumor-like formations; indications and contraindications for the use of modern methods of diagnosis and treatment of tumor-like formations of soft tissues and bones of SLD, benign odontogenic and non-odontogenic tumors of the jaws, osteogenic tumor-like formations of the jaws, benign soft tissue tumors of SLD, precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue, malignant tumors of soft tissues and bones of SCD and neck, benign and malignant tumors and salivary gland cysts.

**Develop** a plan and conduct an examination of a patient with a benign or malignant neoplasm, prescribe the necessary additional research methods (x-ray, radioisotope, cytological, histological) and be able to interpret their results, justify the volume and sequence of treatment measures (surgical removal, radiation therapy, chemotherapy, cryotherapy, etc.), aimed at the rehabilitation of the patient.

**Perform** anamnesis collection and examination of a patient with benign and malignant SLD formation, fill out the relevant medical documentation, refer the patient to the appropriate diagnostic and treatment depending on the type and stage of the cancer.

**Carry out** puncture, incisional and excisional biopsy of SCD tissues, master the technique of diathermocoagulation and cryodestruction.

**Prescribe** complex medical treatment of patients with benign and malignant tumors of the SCD in the pre-, intra- and postoperative periods, provide appropriate recommendations.

**To demonstrate** the ability to interpret the results of additional examination methods aimed at the verification of SLD tumors, methods of biopsy of soft and hard tissues, to draw up a plan of complex (surgical, radiation, chemotherapy) treatment of an oncological patient.

### **Topic #1. Classification of tumors. Etiology, pathogenesis, patterns of growth and development of benign tumors, principles of their differential diagnosis and treatment. Medical examination of cancer patients.**

The concept of tumors. Classification of SCD tumors. Statistics of the prevalence of SCD tumors. The role and

tasks of the dentist in the system of providing specialized care to patients with SCD tumors. The importance of early diagnosis.

"Oncological vigilance" is a system of concepts, knowledge and principles of the organization of the anticancer service. Cancer surveillance during examination of surgical and dental patients.

Endo- and exofactors that contribute to the emergence of tumors. Patterns of growth and development of benign tumors, principles of their differential diagnosis.

Examination of patients for the purpose of diagnosing tumors, the role of modern methods of examination (x-ray, radioisotope diagnostics, cytological and histological verification of tumors). Algorithm of diagnosis of tumor processes of SCD and principles of their treatment.

Stages of lesions according to the TNM system . Clinical groups of cancer patients. Medical examination of cancer patients.

***The list of questions that the student must study:***

1. Etiological factors leading to the occurrence of SCD tumors. Types of carcinogens.
2. Theories of the origin of tumors. Phases of carcinogenesis.
3. Classification of SCD tumors.
4. Stages of lesions according to the TNM system .
5. Classification and features of benign tumors of SCD.
6. Comparative characteristics of benign and malignant tumors.
7. The main methods of diagnosis of SCD tumors.
8. Medical examination of cancer patients.

***Topic #2. Benign tumors of the tissues of SLD ( skin , adipose , connective , muscle , nervous tissues , blood and lymphatic vessels ): etiology , pathogenesis , classification , histological structure , clinic , differential diagnosis , treatment .***

Adipose tissue tumors: lipoma.

Tumors of fibrous tissue: fibroma.

Tumors of muscle tissue: myoma, leiomyoma, rhabdomyoma.

Tumors of blood vessels: hemangioma (capillary, cavernous, cluster-shaped, benign hemangioendothelioma).

Tumors of lymphatic vessels: lymphangioma - capillary, cavernous, (cystic hygroma).

Tumors of the peripheral nerves of the face: neurilemoma (schwanoglioma), neurofibroma.

Etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment.

Examination of patients for the purpose of diagnosing tumors, the role of modern methods of examination (x-ray, radioisotope diagnostics, cytological and histological verification of tumors). Plan of complex treatment of patients with the indicated pathology. Complications, prevention.

***The list of questions that the student must study in class:***

1. Etiopathogenesis of benign tumors of soft tissues of SCD.
2. Classification of neoplasms of soft tissues of SCD.
3. Clinical manifestations, diagnosis, treatment of benign connective tissue tumors.
4. Clinical manifestations, diagnosis, treatment of benign tumors from adipose tissue.
5. Clinical manifestations, diagnosis, treatment of benign neurogenic tumors and tumor-like formations.
6. Principles of preventing the development of complications in patients with benign tumors of soft tissues of SCD.

Tumor-like formations of fibrous tissue: gingival fibromatosis, radial keloid, keloid, peripheral giant cell granuloma (giant cell epulis), fibromatous and angiomatous epulis.

Tumor-like formations of adipose tissue: diffuse lipomatosis.

Tumor-like formations of lymphatic vessels: systemic lymphangiomatosis.

Tumor-like formations of the peripheral nerves of the face: neurofibromatosis (Recklinghausen's disease), traumatic neuroma.

Tumor-like formations of embryonic origin: teratoma (dermoid cyst). Congenital cyst and fistula from embryonic remains. Lateral (branchiogenic), median (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 diagnosing tumor-like formations, the role of modern methods of examination (x-ray, radioisotope diagnostics, cytological and histological verification).

Plan of complex treatment of patients with the indicated pathology. Complications, prevention.

***The list of questions that the student must study in class:***

1. Pathomorphology of congenital tumor-like neoplasms.
2. Clinical manifestations, diagnosis, treatment of dermoid and epidermoid cysts.
3. Clinical manifestations, diagnosis, treatment of median cysts and fistulas of the neck.

4. Clinical manifestations, diagnosis, treatment of lateral cysts and fistulas of the neck.
5. Clinical manifestations, diagnosis, treatment of tumor-like formations of fibrous tissue.
6. Clinical manifestations, diagnosis, treatment of tumor-like formations of adipose tissue.
7. Clinical manifestations, diagnosis, treatment of tumor-like formations of lymphatic vessels.
8. Clinical manifestations, diagnosis, treatment of tumor-like formations of the peripheral nerves of the face.
9. Differential diagnosis of congenital tumor-like formations.
10. Principles of treatment of congenital tumor-like formations.
11. Prevention of complications.

***Topic No. 3 . Jaw cysts: classification, etiology, pathogenesis, histological structure, clinic, diagnosis, treatment, complications, prevention.***

Cyst, as a result of developmental defects: odontogenic (primary cyst - keratocyst, eruption cyst, follicular); non-odontogenic (cyst of the nasopalatine (incisor) canal, globulomaxillary, aneurysmal and solitary).

Odontogenic cyst of an inflammatory nature - radicular.

Clinical manifestations, diagnosis, mechanism of growth, pathological anatomy, methods of surgical treatment: cystotomy, cystectomy, two-stage method, plastic cystectomy, oronasal cystectomy. Technique of surgical intervention, postoperative management of patients.

Plan of complex treatment of patients with the indicated pathology.

***The list of questions that the student must study:***

1. Definition of the concept of "cyst".
2. Classification of cysts of odontogenic and non-odontogenic origin.
3. Etiology, pathogenesis, clinical manifestations and treatment of radicular cysts.
4. Etiology, pathogenesis, clinical manifestations and treatment of follicular cysts.
5. Etiology, pathogenesis, clinical manifestations and treatment of congenital jaw cysts.
6. Methods of surgical treatment: cystotomy, cystectomy, two-stage method, plastic cystectomy, oronasal cystectomy.
7. Technique of surgical intervention, postoperative management of patients.

***Topic #4. Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma, epulid. Classification, histological structure, clinic, differential diagnosis, principles and methods of treatment.***

Classification: benign - ameloblastoma (adamantinoma), ameloblastic fibroma (soft odontoma), complex odontoma, fibroma (odontogenic), myxoma and cementoma - benign cementoblastoma (true cementoma), cementing fibroma, epulid.

Classification, histological structure, clinic, differential diagnosis, principles and methods of treatment, prevention of complications. Examination of patients for the purpose of diagnosing tumors, the role of modern methods of examination (x-ray, radioisotope diagnostics, cytological and histological verification of tumors).

***The list of questions that the student must study:***

- E. Types of odontogenic tumors of SCD.
3. Etiopathogenesis of odontogenic tumors of the jaws.
4. Pathanatomy of various types of odontogenic tumors.
5. Clinical manifestations of ameloblastoma, diagnosis, differential diagnosis, treatment.
6. Peculiarities of clinical manifestations, diagnosis, differential diagnosis and treatment with odontology.
7. Clinic, diagnosis, differential diagnosis and treatment with cement.
8. Epulis. Clinic, diagnosis, differential diagnosis, treatment.

***Topic #5. Benign neodontogenic tumors of the jaws (osteoblastoma, osteoclasts, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, etc.): classification, histological structure, clinic, differential diagnosis, principles and methods of treatment.***

Etiology, pathogenesis, main clinical symptoms and principles of diagnosis of benign tumors of the jaw bones. Histological structure, differential diagnosis. Plan of complex treatment of patients with the indicated pathology. Examination of patients for the purpose of diagnosing tumors, the role of modern methods of examination (x-ray, radioisotope diagnostics, cytological and histological verification of tumors).

Bone-forming tumors: osteoma, osteoidosteoma, osteoblastoma, ossified fibroma (fibroosteoma).

Cartilaginous tumors: chondroma, osteochondroma (bone-cartilaginous exostosis).

Giant cell tumor (osteoblastoclastoma).

***The list of questions that the student must study:***

1. Classification of benign tumors of the jaw bones.
2. Etiopathogenesis of benign jaw tumors.
3. Features of the clinical course of benign tumors of the jaws.

4. Methods of diagnosis of benign tumors of the jaws.
5. Methods of treatment and rehabilitation of patients with benign tumors of the jaws.
6. Principles of preventing the development of complications in patients with the specified pathology.
7. Osteoblastoma, clinic, differential diagnosis, treatment.
8. Osteoclastoma, clinic, differential diagnosis, treatment.
9. Osteoma, clinic, differential diagnosis, treatment.
10. Osteoid-osteoma, clinic, differential diagnosis, treatment.
- I. Chondroma, clinic, differential diagnosis, treatment.
5. Hemangioma, clinic, differential diagnosis, treatment.
6. Fibroma, clinic, differential diagnosis, treatment.

**Topic #6. Osteogenic tumor-like formations of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment features.**

Tumor-like bone lesions - fibrous dysplasia, cherubism, eosinophilic granuloma (Taratin's disease), deforming ostosis (Paget's disease). Central (reparative) giant cell granuloma. Etiology, pathogenesis, classification, histological structure.

The main clinical manifestations and principles of diagnosis of osteogenic tumor-like neoplasms of the jaws. Examination of patients for the purpose of diagnosing tumors, the role of modern methods of examination (x-ray, radioisotope diagnostics, cytological and histological verification of tumors).

Plan of complex treatment of patients with the indicated pathology. Complications, prevention.

**The list of questions that the student must study:**

1. Etiology and pathogenesis of osteogenic neoplasms of the jaws.
2. Basic diagnostic methods, differential diagnosis.
3. Clinical manifestations at all stages of the clinical course of osteogenic tumor-like neoplasms of the jaws.
4. Methods of surgical treatment of osteogenic tumor-like neoplasms of the jaws.
5. Complications, causes of their occurrence. Preventive measures to prevent the occurrence of this pathology.
6. Fibrous osteodysplasia, clinic, differential diagnosis, treatment.
7. Parathyroid osteodystrophy, clinic, differential diagnosis, treatment.
8. Paget's disease, clinic, differential diagnosis, treatment.
9. Eosinophilic granuloma, clinic, differential diagnosis, treatment.

**Topic #7. Benign tumors and cysts of the salivary glands: classification, etiology, histological structure, clinic, differential diagnosis, principles and methods of treatment. Malignant tumors of the salivary glands: histological structure, clinical forms, differential diagnosis, treatment.**

Retention cyst of small salivary glands. Cyst of large salivary glands. Ranula Clinic, differential diagnosis, histological structure. Methods of treatment.

Tumor-like: benign - lymphoepithelial lesions, etc. Diagnosis, clinic, treatment. Complication.

Epithelial tumors: adenoma - polymorphic (mixed tumor), monomorphic (adenolymphoma, etc.); mucoepidermoid; cylindroma, adenocellular tumor. Differential diagnosis of benign and malignant salivary gland tumors.

Carcinoma: adenocystic (cylindroma), adenocarcinoma, epidermoid carcinoma, carcinoma in polymorphic adenoma.

Treatment of nosological forms of tumors taking into account localization in large and small salivary glands.

Surgical methods of treatment and indications for them.

**The list of questions that the student must study:**

L Clinical and morphological classification of salivary gland tumors.

**A list of questions that the student should study in class**

1. Clinical and morphological classification of benign tumors and cysts of the salivary glands.
2. Salivary gland cysts:
  - a) , retention cysts of small salivary glands;
  - b) , retention cysts of the sublingual salivary glands (ranulae);
  - c) , submandibular salivary gland cysts;
  - d) . parotid salivary gland cysts;
  - e) . oncocytosis;
  - f) ) Kuettner's syndrome.
3. Clinic, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumor).
4. Clinic, diagnosis and treatment of monomorphic adenomas:
  - a) , adenolymphomas (Wortin's tumors);
  - b) , oxyphilic adenoma (oncocytoma).
5. Clinic, diagnosis and treatment of non-epithelial salivary gland tumors.

6. Surgical treatment of benign salivary gland tumors.
7. Mucoepidermoid cancer of the salivary glands, clinical manifestations, diagnosis, treatment.
8. Adenocarcinoma and cylindroma, clinical manifestations, diagnosis, treatment.
9. Clinic, diagnosis, treatment of salivary gland sarcoma.

**Topic #8. Biological signs of clinical oncology. Precancerous diseases and cancer of the skin of the face: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgical, radiation, chemotherapy, immunocorrection, etc.), prevention and prevention of complications.**

Classification. Optional, obligatory forms. Background diseases. Clinical manifestations, methods of diagnosis, treatment.

Obligatory precancers - warty, nodular precancer and limited precancerous hyperkeratosis of the red border of the lip, Manganotti abrasive cheilitis, Bowen's disease, erythroplakia.

Optional - erosive and verrucous forms of leukoplakia, erosive-ulcerative and hyperkeratotic forms of lupus erythematosus and lichen planus, post-radiation stomatitis.

Histological structure, modern methods of diagnosis and treatment of precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue.

Principles and methods of dispensation of patients with precancerous diseases of the face and oral cavity.

**The list of questions that the student must study:**

1. Etiology, pathogenesis of precancerous conditions.
2. Classifications of precancerous conditions.
3. Morphological and clinical diagnosis of precancerous conditions.
4. Methods of examination of patients with precancerous conditions.
5. Clinic, diagnosis, treatment of precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue.
6. Differential diagnosis of obligate and facultative forms of precancerous diseases.
7. Peculiarities of the histological structure of precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue.
8. Prevention of precancerous conditions.
9. Dispensary observation of patients with precancerous conditions.

**Topic #9-10. Precancerous diseases and cancer of the lower lip and mucous membrane: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgical, radiation, chemotherapy, immunocorrection, etc.), prevention and prevention of complications.**

Classification, histological structure, clinical forms, stages of the disease, differential diagnosis of malignant tumors of SCD. Principles of treatment.

Biological bases and immunological aspects of clinical oncology. Peculiarities of the growth of a malignant tumor cell and the effect on it of radiation exposure, cryotherapy, hyperthermia, chemotherapy, oxygenation, ultrasound, hypoxia. Immunotherapy of patients with malignant tumors and complex treatment of patients with malignant tumors.

Frequency, etiology, pathogenesis of malignant neoplasms of the skin of the face, mucous membrane and organs of the oral cavity (melanoma, basal cell carcinoma, carcinoma, sarcoma). Classification, clinical symptoms, diagnosis, modern methods of treatment.

**The list of questions that the student must study:**

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 cervical spine and neck.
3. Clinic, diagnosis and treatment of melanoma.
4. Clinic, diagnosis and treatment of basal cell carcinoma.
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. The mechanism of tumorigenesis of cells and further tumor development.
9. Biological carcinogens.
10. Stages (phases) of carcinogenesis.
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 of ionizing radiation on a malignant tumor cell.
16. Effect of cryotherapy on malignant tumor cells.
17. The effect of hyperthermia on a malignant tumor cell.
18. Effect of chemotherapy drugs on a malignant tumor cell.
19. The effect of oxygenation on a malignant tumor cell.
20. The effect of ultrasound on a malignant tumor cell.
21. The effect of hypoxia on a malignant tumor cell.
22. Immunotherapy of patients with malignant tumors.
23. Complex treatment of patients with malignant tumors.

***Topic #11. Cancer and sarcoma of the jaws: origin and histological structure, classification, clinic, differential diagnosis, treatment, complications and prevention.***

Malignant - intraepithelial and squamous cell carcinoma, lymphoepithelioma, basal and squamous cell carcinoma. Clinic, diagnosis, treatment depending on the stage of the lesion (surgical, radiation, cryogenic, laser, combined effects).

Lip cancer. Cancer of the oral cavity (tongue, cheeks, floor of the mouth, hard and soft palate). Cancer of the upper and lower jaws. Clinic, diagnostics, principles of treatment (radiation, surgery, cryogenic, laser, chemotherapy, medication, immunotherapy, combined effects).

Indications and contraindications for surgical intervention on the primary focus and on the ways of regional metastasis. Peculiarities of analgesia and postoperative management of patients. Indications for intensive therapy. Prognosis and criteria for recovery.

Sarcoma of soft tissues and bones of the maxillofacial region. Clinic, diagnosis, treatment.

***The list of questions that the student must study:***

1. Precancerous conditions of the jaws.
2. Epidemiology, etiopathogenesis of malignant tumors of the jaws.
3. Pathanatomy of cancer and sarcoma of the jaws.
4. Clinical manifestations of cancer (carcinoma) of the upper jaw, diagnosis, treatment.
5. Clinical manifestations of cancer of the lower jaw, diagnosis, treatment.
6. Clinic, diagnosis, treatment of sarcoma of the upper jaw.
7. Clinic, diagnosis, treatment of sarcoma of the lower jaw.
8. Surgical treatment of malignant tumors of the jaws.

***Topic #12. Final lesson.***

**The list of practical skills that a student must master:**

1. Draw up a plan-scheme for the organization of providing medical assistance to maxillofacial wounded at the stages of medical evacuation.
2. Draw up a comprehensive treatment plan for patients with gunshot wounds.
3. Be able to collect anamnesis and conduct an examination of patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
4. Be able to draw up an examination plan for patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
5. Be able to draw up a diagnostic plan and interpret additional examination methods in patients with tumor-like neoplasms of soft tissues of SCD.
6. Be able to perform a diagnostic puncture.
7. Be able to perform an incisional biopsy.
8. Be able to perform an excisional biopsy.
9. Be able to determine the indications and contraindications for surgical treatment of benign and malignant tumors, tumor-like and precancerous diseases of SCD.
10. Be able to draw up a plan and volume of drug therapy for patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
11. Be able to make a plan and volume of postoperative drug therapy.
12. Be able to perform diathermocoagulation and cryodestruction.
13. To be able to diagnose complications that may arise after surgical treatment of benign and malignant tumors, tumor-like formations of SCD.
14. To be able to draw up a plan of complex treatment of patients with malignant diseases of SCD.

## **Content module 2:**

**Explain and interpret** the features of gunshot, thermal, chemical injuries of SLD, taking into account the aesthetic and functional significance of the face and the topographic proximity of vital organs, the principles of providing emergency care to patients with facial trauma in extreme situations, the sequence of diagnostic and treatment measures in the specified cases.

**Analyze** the complexity of traumatic (fire, thermal, chemical) damage to the SCD, determine the need for the involvement of specialists in related specialties, the priority of providing diagnostic and medical care depending on the nature and type of damage, understand the principles of medical triage of victims in the event of hostilities.

**Develop** a plan and conduct an examination of a patient with traumatic (fire, thermal, chemical) damage to the SCD of various localization, prescribe the necessary additional research methods and be able to interpret their results, justify the sequence of urgent and planned medical measures aimed at the rehabilitation of the victim in extreme situations.

**Perform** anamnesis collection and examination of a patient with traumatic (fire, thermal, chemical) damage to the SCD, fill out relevant medical documentation, refer the victim to diagnostic and treatment facilities of various levels of medical care, depending on the general condition of the victim and the severity of traumatic damage to the SCD.

**To carry out** PHO of soft tissue wounds of SCD, examination of the wound canal in case of gunshot wounds of soft tissues and bones of the facial skeleton, temporary (transport) immobilization for fractures of the upper and lower jaw in extreme situations, to provide assistance in emergency situations.

**Prescribe** anti-shock, analgesic and other types of drug therapy at the stages of evacuation of victims in the conditions of hostilities, provide appropriate recommendations.

**Demonstrate** the technique of antiseptic treatment of gunshot wounds, thermal and chemical damage to the skin of the face, the technique of applying sutures during PHO, the technique of temporary or prolonged intermaxillary immobilization depending on the general condition of the patient and the features of damage to the jaw bones, in particular the number of teeth, perform measures aimed at preventing asphyxia .

***Topic #1. The subject and tasks of military dentistry. Organization of surgical care for maxillofacial wounded in the army in peacetime and in extreme conditions. Military medical doctrine. Basic principles of organization, volume and content of assistance to the injured in the maxillofacial region (SHLD). Traumatic disease: pathogenesis, special features in the case of damage to the SCD.***

Causes of traumatism, its prevention, statistics of injuries to the maxillofacial area in peacetime and wartime, their classification. General characteristics and features of facial injuries.

Organization and provision of all types of dental care to the personnel of the Armed Forces of Ukraine in peacetime and wartime conditions. Basic organizational principles of providing surgical dental care to victims of injuries to soft tissues and bones of the face. Principles of medical triage and evacuation of the wounded. The volume of medical assistance at the stages of medical evacuation of the wounded. Pre-medical, first medical, qualified and specialized care.

Military medical doctrine.

***The list of questions that the student must study:***

1. The subject and tasks of surgical stomatology and maxillofacial surgery in extreme conditions.
2. The main provisions of the military medical doctrine.
3. Organization of surgical dental care in the Armed Forces of Ukraine in peacetime.
4. Principles of the organization of the staged evacuation system for the treatment of the wounded during military operations.
5. Sources of injuries in the jaw area.
6. Principles of medical triage and evacuation of the injured in the maxillofacial region.
7. Principles of staged provision of medical care. Assistance on the battlefield and at the stages of medical evacuation.
8. Scope and content of medical care for the injured in the maxillofacial area in peacetime and wartime.
9. Pre-medical medical care.
10. First medical aid.
11. Qualified medical assistance.
12. Specialized medical assistance.

***Topic #2. General characteristics, clinical course, diagnosis of gunshot wounds and damage to soft tissues, facial bones in peacetime, in extreme conditions: classification, features of the clinical course, diagnosis of injuries at the stages of medical evacuation. The influence of violations of facial aesthetics on the psyche of the***

**wounded. Plastic surgery in the treatment of facial injuries. Modern gunshot wound and its treatment.**

Impressive factors of modern firearms: bullet, shrapnel, blast wave, thermal effects. Zones of tissue damage in the wound canal.

Modern gunshot wound: morphological and clinical features, course of injury, principles of treatment. Immediate complications after injury.

Clinical manifestations of facial gunshot wounds depending on the time of injury. Peculiarities of the course of penetrating, tangential, blind wounds (bullet and shrapnel, penetrating and non-penetrating).

Methods of manual and instrumental wound examination. Peculiarities of radiological research methods: radiography in various projections, including with contrast. Computer and magnetic resonance imaging, ultrasound diagnostics. Methods of functional diagnostics: rheo-, polaro- and electromyography.

The use of computer software at the stages of diagnosis and planning of surgical interventions in case of gunshot injuries of soft tissues of SCD.

The scope of the examination of patients with gunshot trauma of the maxillofacial area during treatment in hospital conditions, the participation of related specialists in the examination.

Surgical treatment of gunshot wounds. The timing of the intervention. Choice of pain relief methods. The sequence of treatment of wounds of the mucous membrane of the mouth, bones, soft tissues of the face, functional and cosmetic requirements. Indications for applying different types of sutures to facial wounds. Primary, primary-delayed suture, early and late secondary sutures. Plate seams. Possibilities of primary plastic surgery. Secondary surgical treatment of wounds. Measures to prevent complications.

***The list of questions that the student must study:***

1. Classification of gunshot injuries of soft tissues of the face.
2. Features of the clinical picture of gunshot wounds of soft tissues depending on their localization.
3. Zones of tissue damage in the wound channel.
4. Peculiarities of the course of penetrating, tangential, blind wounds (bullet and shrapnel, penetrating and non-penetrating).
5. Basic principles of PHO of wounds.
6. Peculiarities of surgical treatment of gunshot wounds of SHLD.
7. Characteristic features of the soft tissues of the maxillofacial area affecting wound healing processes.
8. Indications for applying different types of sutures to facial wounds.
9. Secondary surgical treatment of wounds.
10. Medicinal methods of wound treatment in the postoperative period.
11. Classification, clinic and treatment of complications of facial gunshot wounds, their prevention.
12. Medical assistance to the wounded at the scene of injury and at the stages of medical evacuation.
13. Types of seams and suture material. Plastic seams: purpose and modification.
14. The influence of violations of facial aesthetics on the psyche of the wounded.

General characteristics, clinical course, diagnosis of gunshot injuries to facial bones in extreme conditions: classification, features of the clinical course, diagnosis of injuries at the stages of medical evacuation. Treatment at the stages of medical evacuation. Complications and their prevention.

Fire injuries of the lower jaw: statistics, classification, clinical picture, treatment, complications and their prevention. Treatment at the stages of medical evacuation.

Fire damage to the bones of the middle zone of the face: statistics, classification, clinical picture, treatment at the stages of medical evacuation. Complications and their prevention.

Inflammatory osteomyelitis, features of the clinical course. Diagnosis and treatment.

The influence of violations of facial aesthetics on the psyche of the wounded. Bone-plastic surgery in the treatment of facial gunshot injuries.

***The list of questions that the student must study:***

1. Statistical characteristics and sources of gunshot wounds of the maxillofacial area in the conditions of military operations and emergency situations.
2. Classification of facial gunshot wounds.
3. Characteristics of gunshot wounds to the face depending on the type of weapon.
4. Features of the course of gunshot injuries depending on the anatomical and physiological features of the maxillofacial area.
5. Diagnosis of gunshot wounds to the face and determination of the severity of the injury.
6. The scope of providing first aid to victims with facial gunshot wounds.
7. The sequence of treatment and evacuation measures during the mass admission of patients with gunshot wounds to the face.
8. Principles of medical sorting of patients with gunshot wounds.
9. Conservative and surgical methods of treatment of gunshot wounds of the maxillofacial area.
10. Inflammatory osteomyelitis, features of the clinical course. Diagnosis and treatment.

11. Methods of restoring the integrity of the bones of the facial skeleton and post-traumatic defects. Osteoplastic surgery.
12. Peculiarities of rehabilitation of patients with maxillofacial injuries. Medical ethics and deontology.

***Topic #11. Thermal injuries of the face in peacetime and extreme conditions , their consequences , treatment , prevention complications , opportunities plastic surgery . Opikova disease at injuries face \_ Combined damage SHLD ( BOR , RR ), pathogenesis , variants clinical I will run depending from features lesions , their treatment***

Thermal damage to the face in extreme conditions. Classification. Features, causes, severity and depth of damage, possible complications. Treatment of facial burns.

Napalm burns. Electric injury. Cold injury, frostbite. Clinic, treatment.

Chemical damage: acids, alkalis, combat poisons.

Damage to facial tissues as a result of penetrating radiation and radioactive contamination. Clinic, diagnosis, treatment of these injuries.

Providing medical assistance at the stages of medical evacuation. Prevention of complications, their consequences.

Possibilities of plastic surgery for thermal injuries of the face.

Burn disease: clinic, diagnosis, treatment.

***The list of questions that the student must study:***

1. Thermal injuries of the face in extreme conditions: clinic, diagnosis, provision of medical assistance at the stages of medical evacuation.
2. Burn disease: clinic, diagnosis, treatment. Principles of providing medical assistance at the stages of medical evacuation.
3. Features of thermal damage in SHLD.
4. Clinical picture of burns, methods of determining the area of damaged tissues.
5. Treatment of thermal damage in SLD, prevention of complications.
6. Electric injury, clinic, assistance.
7. Cold injury, frostbite, clinic, treatment.
8. Chemical damage, clinic, treatment.
9. Damage to facial tissues as a result of penetrating radiation and radioactive contamination. Clinic, diagnosis, treatment of these injuries.
10. General principles and types of restorative operational interventions in the SHLD.
11. Possibilities of plastic surgery for thermal damage to the face.

***Combined damage of SHLD. Radiation sickness. Clinical manifestations. Features of treatment. Syndrome of mutual aggravation.***

The causes of combined damage to the SCD. Diagnosis of combined damage by toxic warfare agents (BOB) and radioactive substances (RR). Principles of sorting the injured and sequence of assistance in case of combined injuries. The consequences of the damaging factors of nuclear weapons on the human body.

Combined radiation damage to the face. Pathogenesis, variants of the clinical course depending on the nature of the damage.

Radiation sickness. Clinical manifestations. Peculiarities of the course of the wound process depending on the stage of radiation sickness. Features of treatment.

Syndrome of mutual aggravation.

Term and features of surgical treatment of wounds and features of treatment of fractures and defects of jaws in combined injuries.

Combined chemical, bacteriological and mechanical lesions of SLD: clinical course, treatment at the stages of medical evacuation, features of wound treatment, hemostasis, wound healing.

***The list of questions that the student must study:***

1. Classification of combined injuries.
2. Pathogenesis of combined injuries.
3. Variants of the clinical course of combined lesions of SCD.
7. Prevention of complications in patients with combined damage of the SCD.
8. Sorting of the wounded.
9. The concept of radiation sickness.
10. Features of the clinical course of radiation sickness depending on the degree of severity.
11. Mechanisms of action of military poisons.
12. Symptom of mutual aggravation in mechano-chemical injuries of SHLD.
13. Peculiarities of providing medical care to maxillofacial wounded with combined injuries.

***Final lesson from the section "Surgical dentistry of extreme conditions and military maxillofacial surgery".  
The list of questions that the student should study in order to master the topics of content module #2***

1. Tasks of surgical stomatology in extreme situations.
2. Organization of surgical dental care for the wounded in the SLD in the Armed Forces of Ukraine.
3. Sources of injuries in ShLD.
4. Military medical doctrine.
5. Principles of medical triage and evacuation of the wounded in the SHLD.
6. Principles of staged provision of medical care. Assistance on the battlefield and at the stages of medical evacuation.
7. The scope and content of medical care for the wounded in the SLD in peacetime and wartime.
8. Fiery injuries of soft tissues of SCD: classification, clinical course, diagnosis, principles and methods of treatment, staged treatment.
9. Primary surgical treatment of wounds.
10. Fire injuries of the bones of the face: classification, diagnosis, features of the clinical course, assistance at the stages of medical evacuation.
11. Inflammatory osteomyelitis.
12. Modern gunshot wound of SHLD: features, treatment.
13. Thermal injuries of the face in extreme conditions: clinic, diagnosis, provision of medical assistance at the stages of medical evacuation.
14. Burn disease: clinic, diagnosis, treatment.
15. Possibilities of plastic surgery for thermal damage to the face.
16. Asphyxia due to tissue damage in SLD: classification, features of the clinical course. Providing assistance.
17. Bleeding in case of tissue damage of SCD: classification, assistance.
18. Neck injury: features of the clinical course and care.
19. Foreign bodies in SCD: etiology, clinical symptoms, methods of removal.
20. Frostbite of the face: classification, clinical manifestations, diagnosis, treatment.
21. Combined damage of SHLD.
22. Radiation sickness: clinical manifestations, features of treatment, mutual aggravation syndrome.
23. Complications of maxillofacial injuries, their diagnosis. Assistance on the battlefield and at the stages of medical evacuation.
24. Feeding the wounded in ShLD. Types of diets.
25. Care of the wounded. Physical therapy and physical therapy in the treatment of the injured in SCD.
26. Military medical examination of the wounded in the ShLD.

**Content module 3:**

**To explain and interpret** the peculiarities of traumatic injuries of SLD, taking into account the aesthetic and functional significance of the face and the topographical proximity of vital organs, the principles of providing emergency care to patients with facial trauma, the role of specialists of related specialties in the comprehensive examination of victims.

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

**Develop** a plan and conduct an examination of a patient with traumatic damage to the SCD of various localization, prescribe the necessary additional research methods and be able to interpret their results.

**Perform** anamnesis collection and examination of a patient with traumatic damage to the SLD, fill out the relevant medical documentation; perform cardiopulmonary resuscitation.

**To carry out** PHO of wounds of soft tissues of SCD, temporary (transport) immobilization for fractures of the upper and lower jaw, to provide assistance in emergency situations.

**Prescribe** drug therapy in the pre- and post-operative periods in patients with traumatic lesions of the SLD, justify the feasibility of prescribing premedication depending on the patient's psycho-somatic condition, the nature and scope of the surgical intervention, provide appropriate recommendations.

**To demonstrate** the technique of antiseptic treatment of wounds, the technique of applying sutures during PHO, ligature binding of teeth, manufacturing and applying bent aluminum splints, their fixation for temporary or prolonged intermaxillary immobilization

***Topic #1. Statistics and classification of injuries of the spinal cord during peacetime. Methods of examination of patients with maxillofacial trauma. Organizational principles of providing assistance to victims of maxillofacial injuries.***

Causes of traumatism, its prevention, statistics of injuries to the maxillofacial area in peacetime and wartime, their classification. General characteristics and features of facial injuries.

Types of surgical dental care: polyclinic and inpatient (emergency and planned). Organization of work and

equipment of the surgical department (office) of the dental polyclinic, maxillofacial department of the hospital, operating room, dressing room.

Medical documentation in the surgical department (office) of the dental polyclinic and in the maxillofacial department of the hospital.

Peculiarities of examination of patients with injuries of the maxillofacial area.

The importance of personal communication between the doctor and the patient. Emotional factors associated with diseases, injuries and defects of the face and the treatment being carried out.

Collection of subjective patient data:

Complaints at the time of contacting a medical institution.

Anamnesis of the disease: development of the disease, its dynamics, previous treatment.

Life anamnesis: hereditary, transferred and concomitant diseases, bad habits - use of drugs, alcoholic beverages, smoking; heredity, allergic history.

Objective examination: general condition, consciousness. Examination of organs and systems in a hospital.

Examination of the maxillofacial area. Facial examination. Palpation. Examination of organs and soft tissues of the oral cavity, examination of teeth. General clinical, laboratory and special research methods. Study of the function of motor and sensory nerves. Examination of salivary glands and their ducts, temporomandibular joints, lymphatic apparatus of the face and neck. Establishing the nature and size of defects and deformations of the tissues of the face and oral cavity, the condition of the surrounding tissues. Assessment of degree, anatomical, functional and aesthetic disorders.

Objective research methods using modern diagnostic equipment. Radiological: radiography in various projections, including with contrast. Computer and magnetic resonance tomography, radioisotope, ultrasound diagnostics, remote and contact thermography. Morphological methods: cytological examination of impressions, scrapings, puncture material; histological examination of biopsy material. Methods of functional diagnostics: rheo-, polaro- and electromyography,

electroodontology. Application of computer software at the stages of diagnosis and planning of surgical interventions in ACL.

The scope of the examination of patients with trauma of the maxillofacial area during treatment in polyclinic and hospital conditions, the participation of related specialists in the examination.

***The list of questions that the student must study in class:***

1. Principles of organization of dental care for the population of Ukraine.
2. Organization of the work of the surgical department (office) of the dental polyclinic.
3. Peculiarities of the organization and provision of special surgical dental care.
4. Sanitary and hygienic requirements for the surgical department (office) of the dental polyclinic and hospital.
5. Equipment, medical documentation of the surgical room (department).
6. Subjective examination of a surgical dental patient (complaints, medical history, life history).
7. Methods of examination of the general condition of a surgical dental patient.
8. Methods of local examination (extra-oral and intra-oral) of a surgical dental patient.
9. Additional methods of examination (electroodontometry, radiography, morphological, microbiological, functional studies).
10. Indications for hospitalization of surgical dental patients.

***Topic #2. General characteristics, clinical course, diagnosis of gunshot wounds and damage to soft tissues, facial bones in peacetime, in extreme conditions: classification, features of the clinical course, diagnosis of injuries at the stages of medical evacuation. The influence of violations of facial aesthetics on the psyche of the wounded. Plastic surgery in the treatment of facial injuries. Modern gunshot wound and its treatment.***

Classification of dislocations and fractures of teeth.

Clinical signs of dislocations and fractures.

Peculiarities of examination of patients with dislocations and fractures of teeth.

Objective methods of researching dislocations and fractures of teeth. X-ray research methods: radiography in different projections. Computer and magnetic resonance imaging. Clinical assessment of the condition of injured teeth. Indications for removal of these teeth. Methods of functional diagnostics: electroodontodiagnostics. Features of conservative and surgical methods of treatment of dislocations and fractures of teeth. Modern methods of immobilization.

***The list of questions that the student must study in class:***

1. Classification of fractures and dislocations of teeth.
2. Clinic and diagnosis of tooth fractures.
3. Clinic and diagnosis of tooth dislocations.
4. Methods of treating fractures and dislocations of teeth.
5. Indications and contraindications for tooth replantation.
6. Methods of tooth replantation.

## 7. Modern methods of splinting teeth.

### ***Dislocations of the lower jaw. Clinic, diagnosis, treatment.***

Classification of dislocations of the lower jaw.

Etiology and pathogenesis of dislocations of the lower jaw.

Clinical manifestations of various types of jaw dislocations.

Peculiarities of examination of patients with dislocations of the lower jaw. Objective methods of researching dislocations of the lower jaw. X-ray research methods: radiography in different projections. Computer and magnetic resonance imaging, ultrasound diagnostics.

Methods of correcting dislocations of the lower jaw.

#### ***The list of questions that the student must study in class:***

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

### ***Combined injuries of the maxillofacial area. Clinic, diagnosis, treatment. Traumatic disease.***

Craniofacial injury. Fractures of the base of the skull. Diagnosis, treatment. Peculiarities of providing medical assistance in combination of facial damage with concussion and contusion of the brain, liquefaction, and damage to other organs. The role of neurosurgeons, resuscitators, and ophthalmologists.

Traumatic disease: pathogenesis, clinic, principles of treatment, complications. Periods of traumatic illness; provision of medical care at the pre-hospital stage. Basic principles of complex therapy of traumatic disease.

Providing emergency medical aid to victims of various traumatic injuries accompanied by a violation of vital body functions, life-threatening and requiring emergency medical measures.

#### ***The list of questions that the student must study in class:***

1. The concept of "combined damage".
2. Classification of combined injuries of the SHLD. Closed (non-infected) and open (infected) craniocerebral trauma.
3. Concussion, bruise, compression of the brain, clinic, diagnosis.
4. Fracture of the base of the skull, clinic, diagnosis.
5. Principles of providing emergency aid to victims with combined injuries of SCD.
6. Traumatic disease, classification, its periods, diagnosis.
7. Clinical manifestations of a traumatic disease, especially in case of damage to the SCD.
8. Complex therapy of traumatic disease, prevention of complications.
9. Traumatic shock, its stages, clinic, diagnosis.
10. Algorithm for providing emergency medical aid in case of traumatic shock, treatment at the stages of medical evacuation.
11. Pre-hospital and hospital care for patients with traumatic shock.
12. Prevention of traumatic shock.
13. The complex impact of trauma on the body.
14. Prevention of complications in the case of combined damage to the SCD and traumatic disease.

### ***Topic #3. Concomitant complications of SHLD damage (bleeding, asphyxia, shock), their prevention. Medical assistance at the place of injury, at the stages of medical evacuation. Early complications of SHLD damage (syndrome of long-term compression of facial tissues). Medical assistance at the place of injury, at the stages of medical evacuation.***

Classification of complications in the case of SHLD injuries. Causes of early complications of SCD. The dependence of their development on such factors as: the complexity of the injury, concomitant diseases, untimely and inadequate assistance, etc.

1. Clinic, diagnosis, treatment of early general and local complications of SCD damage. Types of bleeding, ways to stop them. Traumatic shock: clinic, diagnosis, treatment. Asphyxia: types, first aid, prevention measures.

Syndrome of prolonged compression of facial tissues. Medical assistance at the scene of the injury.

***The list of questions that the student must study in class:***

2. Classification of complications in the case of SHLD injuries.
3. Asphyxia: types, prevention measures.
4. Traumatic shock: measures of treatment and prevention.
5. Types of bleeding, ways to stop them.
6. Syndrome of prolonged compression of facial tissues; local changes in the injured tissue area, first aid and principles of treatment.

***Late complications and consequences of maxillofacial injuries. Clinic, diagnosis, treatment.***

Causes of late complications and consequences of damage to the SCD. The dependence of their development on such factors as: the complexity of the injury, concomitant diseases, untimely and inadequate assistance, etc.

Clinic, diagnosis, treatment of late complications and consequences of SCD damage. Secondary bleeding, suppuration of hematomas, wounds. Violation of reparative regeneration, false joint, defects and deformations of the face, muscle contractures.

Post-traumatic osteomyelitis. Clinic, diagnosis, treatment.

Principles of prevention and treatment of late complications and consequences of SCD damage.

***The list of questions that the student must study in class:***

1. The causes of late complications and consequences of damage to the SCD.
2. Classification of late complications and consequences of SCD damage.
3. Clinic, diagnosis, treatment of post-traumatic osteomyelitis.
4. Clinic, diagnosis, treatment of post-traumatic maxillary sinusitis.
5. Clinic, diagnosis, treatment of disorders of reparative regeneration of the lower jaw.
6. Clinic, diagnosis, treatment of masticatory muscle contracture.
7. Techniques for stopping secondary bleeding from different areas of SCD.
8. Clinical and X-ray signs of delayed consolidation of bone tissue.
9. Clinical and X-ray signs of false joint formation.

***Topic #4. Damage to soft tissues of SCD in peacetime, in extreme conditions: classification, clinical course, methods of surgical treatment of wounds, types of sutures. Providing assistance to such wounded at the site of injury, at the stages of medical evacuation, taking into account the aesthetics of the face.***

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

Contusion of the soft tissues of the face.

Bruises and wounds of soft tissues of the face: bruised, torn, cut, stabbed, chopped, bitten, crushed, scalped.

Features of the clinical course.

***The list of questions that the student must study in class:***

1. Anatomical and functional features of soft tissues of the maxillofacial region (anatomy of mimic and masticatory muscles, innervation, vascularization).
2. Classification of facial soft tissue injuries in peacetime.
3. Contusion of the soft tissues of the face - clinic, diagnosis, first aid.
4. Soreness and wounds of soft tissues of the face (bruised, torn, cut, stabbed, chopped, bitten, crushed, scalped).
5. Features of the clinical picture of soft tissue wounds depending on their localization.
6. Methods of diagnosing wounds of soft tissues of the face.

***Methods of surgical treatment of soft tissue wounds taking into account facial aesthetics, types of sutures. Postoperative wound care.***

Methods of surgical treatment of wounds and types of sutures.

Provision of emergency and first aid to injured patients.

Surgical treatment of maxillofacial wounds.

Methods of patient care in the postoperative period.

***The list of questions that the student must study in class:***

1. Basic principles of PHO of wounds.
2. Peculiarities of surgical treatment of wounds on the face.
3. Characteristic features of the soft tissues of the maxillofacial area affecting wound healing processes.
4. Medicinal methods of wound treatment in the postoperative period.
5. Physiotherapy methods of wound treatment.

6. Classification, clinic and treatment of complications of facial wounds, their prevention.
7. Medical assistance to the wounded at the scene of injury.
8. Types of seams and suture material.
9. The influence of violations of facial aesthetics on the psyche of the wounded.

**Topic #5. Damage to the lower jaw in peacetime, in extreme conditions: anatomy of damage, classification, clinical course, diagnosis, medical assistance to the wounded at the site of injury, at the stages of medical evacuation. Surgical treatment of wounds in case of damage to the lower jaw, principles of plastic surgery.**

The frequency, localization and nature of damage to the lower jaw depending on the causes and mechanism of the injury.

Types and typical places of fractures of the lower jaw.

Biomechanics of fractures of the lower jaw, mechanism and nature of displacement of fragments.

Clinical examination of patients with fractures of the lower jaw.

Clinical symptoms of fractures of the lower jaw: anatomical and functional disorders, bite changes, etc.

The condition of the teeth located in the gap of the fracture of the jaws. Indications for removal of these teeth. Intra-articular fractures, fractures with dislocation of the head of the jaw.

Objective methods of researching fractures of the lower jaw with the use of modern diagnostic equipment. X-ray research methods: radiography in different projections. Computer and magnetic resonance imaging, ultrasound diagnostics. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontology. The use of computer software at the stages of diagnosis and planning of surgical interventions for fractures of the lower jaw.

The scope of the examination of patients with trauma of the maxillofacial area during treatment in polyclinic and hospital conditions, the participation of related specialists in the examination.

**The list of questions that the student must study in class:**

1. Classification of fractures of the lower jaw.
2. The mechanism of displacement of fragments of the lower jaw.
3. Clinical symptoms of fractures of the lower jaw.
4. X-ray symptoms of fractures of the lower jaw.
5. Methods of diagnosing fractures of the lower jaw.
6. Diagnostic *techniques during palpation of the lower jaw*.

**Topic #6. Injury of the upper jaw in peacetime, in extreme conditions: anatomy of injuries, classification, clinical course, diagnosis, medical assistance to the wounded at the site of injury, at the stages of medical evacuation. Surgical treatment of wounds in case of damage to the upper jaw and principles of plastic surgery.**

The frequency, localization and nature of damage to the upper jaw depending on the causes and mechanism of the injury.

Types and typical locations of fractures of the upper jaw.

Biomechanics of fractures of the upper jaw, mechanism and nature of displacement of fragments.

Clinical examination of patients with fractures of the upper jaw.

Clinical symptoms of fractures of the upper jaw: anatomical and functional disorders, bite changes, etc.

The condition of the teeth located in the gap of the fracture of the jaws. Indications for removal of these teeth.

Objective methods of researching fractures of the upper jaw with the use of modern diagnostic equipment. X-ray research methods: radiography in different projections. Computer and magnetic resonance imaging, ultrasound diagnostics. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontology. Application of computer software at the stages of diagnosis and planning of surgical interventions for fractures of the upper jaw.

The scope of the examination of patients with trauma of the maxillofacial area during treatment in polyclinic and hospital conditions, the participation of related specialists in the examination.

**The list of questions that the student must study in class:**

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. X-ray symptoms of fractures of the upper jaw.
5. Methods of diagnosis of fractures of the upper jaw.

**Topic #7. Damage to the facial bones, nasal bones in peacetime, in extreme conditions: classification, frequency, clinic, diagnosis, treatment. Achievements of domestic scientists, employees of the department. Damage to the bones of the nose in peacetime, in extreme conditions: classification, frequency, clinic, diagnosis, treatment.**

Fractures of the zygomatic bone and arch, zygomatic complex.

Classification, diagnosis, clinical picture.

Features of treatment. Conservative, surgical methods of repositioning and fixation of fragments; testimony, essence.

Traumatic maxillary sinusitis. Restoration of the bottom of the orbit.

Bone fractures and damage to the cartilage of the nose.

Diagnosis, clinic, treatment. Anterior and posterior tamponade of the nasal passages.

Study of the function of motor and sensory nerves.

Establishing the nature and size of defects and deformations of facial tissues, the condition of surrounding tissues.

Assessment of degree, anatomical, functional and aesthetic disorders.

Objective research methods using modern diagnostic equipment. Radiological: radiography in different projections.

Computer and magnetic resonance imaging, ultrasound diagnostics. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnostics. Application of computer software at the stages of diagnosis and planning of surgical interventions in ACL.

The scope of the examination of patients with trauma of the maxillofacial area during treatment in polyclinic and hospital conditions, the participation of related specialists in the examination.

***The list of questions that the student must study in class:***

1. Classification of damage to the facial bones and arches, nasal bones.
2. Etiology and pathogenesis of damage to the facial bones and arches, nasal bones.
3. Clinic for injuries of facial bones and arches, nasal bones.
4. Subjective examination of a surgical dental patient (complaints, medical history, life history).
5. Methods of examination of the general condition of a surgical dental patient.
6. Methodology of local extraoral examination of a patient with damage to the facial bones and arches, nasal bones.
7. Methodology of local intraoral examination of a patient with damage to the facial bones and arches, nasal bones. Toolkit for examining the oral cavity.
8. Laboratory additional examination methods.
9. Instrumental additional methods of examination.
10. Indications for hospitalization of surgical dental patients.
11. Conservative and surgical methods of treatment of damage to the facial bones and arches, nasal bones.
12. Scheme of medical treatment of patients with damage to the cheekbones and arches, nasal bones.
13. Complications that may occur with damage to the cheekbones and arches, nasal bones.

***Topic #8. Temporary (evacuation-transport) immobilization in case of damage to the bones of the facial skull: requirements, types, disadvantages and advantages. Permanent (therapeutic) immobilization of the jaws with dental splints, mouthguards.***

Temporary (transport) immobilization, indications, means.

Methods of repositioning fragments. Biomechanical bases of fixation of fragments.

The scope and procedure of providing medical assistance to patients with traumatic injuries of the bones of the facial skeleton at the stages of medical evacuation.

***The list of questions that the student must study in class:***

1. Procedure and scope of medical care for patients with traumatic injuries of the bones of the facial skeleton at the pre-hospital stage.
2. Basic principles of evacuation and transport immobilization.
3. Types of methods of immobilization of fragments of facial skull bones.
4. Methods of temporary immobilization.
5. Types of temporary immobilization for fractures of the lower jaw (circular, sling-like, individual chin-parietal bandage, Pomerantseva-Urbanska elastic bandage, etc.)
6. Types of temporary transport immobilization for fractures of the upper jaw (Faltina, Limberga, Entin's rigid chin sling, etc.)
7. Indications and contraindications for ligature binding of teeth and jaws.
8. Methods of ligature binding of teeth and jaws (Limberga, Ivy, Gotsko, etc.).

***Topic #9. Permanent (therapeutic) immobilization of the jaws with dental splints, mouthguards in case of damage to the bones of the facial skull: requirements, types, disadvantages and advantages***

Medical immobilization. Methods of repositioning and fixation of fragments.

Biomechanical bases of fixation of fragments.

Toothed tires, toothed and toothed tires; tires with external mounting. Application of individual and standard tires. Features of the use of a smooth tire clamp. Splints with hook loops and intermaxillary traction for repositioning and fixation of fragments. Tire systems by S. Tigerstedt and others. Technique and technique of splinting (Tigerstedt

splints and others). Indications for the use of individual (orthopedic) splints and laboratory-made devices. Extraoral fixation of fragments in fractures and defects of the lower jaw. Apparatus V.F. Rudka, Zbarzh apparatus and others. their structure, biomechanical properties of application.

***The list of questions that the student must study in class:***

1. Conservative methods of treatment of jaw bone fractures. Advantages and disadvantages.
2. Indications and contraindications for conservative methods of treatment of jaw fractures.
3. Types of tires by method of fixation.
4. Types of tires by manufacturing method.
5. Methods of permanent immobilization used for fractures of the lower jaw.
6. Methods of permanent immobilization used for fractures of the upper jaw.
7. Surgical-orthopedic methods of immobilization for injuries of the jawbones (fixation of splints to other anatomical structures with the help of wire ligatures, "S"-shaped, "H"-shaped hooks, use of cortical screws, etc.).
8. Factors that complicate the consolidation of bone fragments (soft tissue wounds, teeth in the fracture line, loose bone fragments, etc.).
9. Care of the oral cavity after conservative repositioning and fixation of fragments. Terms of permanent immobilization. Drug treatment.

***Topic #10. Osteosynthesis, hardware methods of fixation of fragments of facial skull bones.***

Osteosynthesis of bones of the facial skeleton: indications and contraindications, osteosynthesis with bone sutures; use of metal spokes, bone plates and frames, miniplates with screws. Compression osteosynthesis. Indications for its implementation. Stages and features of osteosynthesis operations in the maxillofacial area.

Hardware methods of fixation of fragments of facial skull bones.

***List of questions that the student should study in class:***

1. Types of surgical methods of treatment of fractures of the bones of the facial skull.
2. The concept of "direct and indirect osteosynthesis".
3. Types of direct osteosynthesis, indications and contraindications for use, methods of surgical interventions.
4. Types of indirect osteosynthesis, indications and contraindications for use, methods of surgical interventions.
5. Compression osteosynthesis.
6. Modern methods of surgical treatment of fractures of the lower jaw (plates, transplants, contour osteoplasty, etc.).
7. Errors and complications during and after the use of surgical methods of treatment of fractures of the bones of the facial skull.
8. Preparation of the patient for osteosynthesis surgery.
9. Peculiarities of the postoperative period in trauma patients. Possible complications.

***Regeneration of bone tissue, types. Healing of jawbones. Methods of optimization of bone tissue regeneration.***

Bone tissue regeneration and bone wound healing. The concept of "regeneration and repair" of tissues. Stages of osteogenesis, general and local factors affecting it. Spectrum of therapeutic measures at different stages of bone tissue regeneration.

Peculiarities of reparative regeneration of facial bones, as a basis and justification for the choice of treatment methods and optimizing influence on these processes.

Optimization of reparative osteogenesis.

***The list of questions that the student must study in class:***

1. Mesenchymal osteogenesis.
2. Cartilage osteogenesis.
3. Factors affecting osteogenesis and regeneration.
4. Types of bone tissue regeneration.
5. Requirements for the repositioning of fragments.
6. Phases of reparative osteogenesis.
7. Causes of impaired reparative regeneration.
8. Methods of optimization of reparative regeneration.
9. Modern methods of bone regeneration research.
10. Types of fusion of bone fragments during fractures.
11. Conditions for improving the course of osteogenesis.
12. Physiotherapy methods of treatment at different stages of reparative osteogenesis.
13. Medicines used to optimize the course of reparative osteogenesis.

***Topic #11 Thermal injuries of the face in peacetime, in extreme conditions, their consequences, treatment, prevention of complications, possibilities of plastic surgery. Burn disease with facial injuries. Combined lesions***

*of SCD (BOR, RR), pathogenesis, variants of the clinical course depending on the features of the lesion, their treatment.*

Thermal damage to the face. Classification. Features, causes, severity and depth of damage, possible complications. Treatment of facial burns.

Napalm burns. Electric injury. Cold injury, frostbite. Clinic, treatment.

Chemical damage: acids, alkalis, poisonous substances.

Clinic, diagnosis, treatment of these injuries.

Protocols for the provision of medical assistance for the specified injuries. Comprehensive treatment of patients.

**The list of questions that the student must study in class:**

1. Classification of thermal injuries.
2. Peculiarities of thermal damage in SLD.
3. Clinical picture of burns, methods of determining the area of damaged tissues.
4. Treatment of thermal injuries in SCD, prevention of complications.
5. Injuries caused by chemicals, first aid.
6. Electrocution, first aid.
7. General principles and types of restorative operational interventions in the SHLD.

**Topic #12 Final lesson.**

**The list of practical skills that a student must master:**

1. Methodology for examination of a patient with tissue trauma of the maxillofacial area (collect anamnesis; conduct an extraoral and intraoral examination of the SCD and assess the extent of tissue damage).
2. Assess the patient's general condition: consciousness, position, presence of external signs of pain, blood loss, impairment of vital functions, etc.
3. To be able to prescribe additional methods of examination in case of SLD injuries and interpret the results (overview X-ray of the bones of the facial skull in two or more projections, 3D cone computer tomography, MRI).
4. Be able to determine the general condition of the patient and the need for resuscitation measures.
5. The technique of applying a bandage (pressure bandage) to a wound.
6. To be able to carry out PHO of wounds of SCD: (prepare a set of tools, dressing and suture material for PHO of wounds; carry out antiseptic treatment of the wound; choose and perform the method of anesthesia on the dummy, carry out layer-by-layer suturing of the wound on the dummy).
7. Carry out temporary and permanent immobilization on the phantom: (apply a sling-shaped bandage; perform intermaxillary ligature tying of the teeth; make: a smooth wire splint, a splint with a U-shaped bend; a splint with an inclined plane; a splint with hooked loops; fix the wire splints on the models according to with the help of steel ligatures).
8. To be able to carry out hardware operative methods of osteosynthesis of bones of the facial skeleton on dummies and phantoms. Learn to fix the device on dummies V.F. Rudka
9. To demonstrate the technique of osteosynthesis of jaw bones on phantoms:
  - a) to fix fragments of the jaw with a bone suture;
  - b) fix jaw fragments using miniplates and screws.
10. Prepare a set of instruments for repositioning the zygomatic bone and arch, nasal bones.
12. Reposition the zygomatic bone and arch on the phantom:
  - a) extraoral method;
  - b) intraoral method;
  - c) osteosynthesis for fracture of the zygomatic bone and arch.
13. To stop the bleeding from the soft tissues of the SHLD with the help of:
  - a) tight wound tamponade;
  - b) diathermocoagulation;
  - c) placing clamps on the vessel;
  - d) sewing a vessel in and outside the wound.
14. Demonstrate on a phantom and explain the methods of determining the burn area of the skin in case of thermal injuries.
15. To demonstrate on a phantom the algorithms for providing emergency aid in the development of asphyxiation.
16. Master the technique of temporarily stopping bleeding from wounds of the maxillofacial area by finger pressure. Conduct:
  - a) compression of the common carotid artery;
  - b) compression of the facial artery;
  - c) compression of the temporal artery.
17. To draw up a comprehensive treatment plan for a patient with a determined damage to the SCD.

***A list of questions that the student must study in order to master the topics of the content module***

The subject and tasks of surgical stomatology and maxillofacial surgery in extreme situations.

1. Organization of surgical dental care in the system of civil care.
2. First aid for the injured in the maxillofacial area.
3. Pre-medical medical care.
4. First medical aid.
5. Qualified medical assistance.
6. Specialized medical assistance.
7. Classification of injuries of the soft tissues of the face during peacetime.
8. Contusion of the soft tissues of the face - clinic, diagnosis, first aid.
9. Cuts and wounds of soft tissues of the face (bruised, torn, cut, stabbed, chopped, bitten, crushed, scalped) - clinic, diagnosis, first aid.
10. Features of the clinical picture of soft tissue wounds depending on their localization.
11. The main principles of conducting PHO of wounds on the face.
12. Characteristic features of the soft tissues of SCD affecting wound healing processes.
13. Medicinal methods of wound treatment in the postoperative period.
14. Physiotherapy methods of wound treatment.
15. Medical assistance to the wounded at the scene of injury and at the stages of medical evacuation.
16. Types of seams and suture material. Plate seams: purpose and modifications.
17. The influence of violations of facial aesthetics on the psyche of the wounded.
18. Plastic surgery in the treatment of facial wounds.
19. Methods of immobilization of fragments of facial skull bones.
20. Methods of temporary immobilization.
21. Selection of methods of fixation of fragments.
22. Indications and contraindications for ligature binding of teeth and jaws.
23. The technique of ligature tying of teeth and jaws (according to Ivy, Limberg, Gotsk, etc.).
24. Types of permanent immobilization for fractures of the bones of the facial skull.
25. Types of splints used for permanent immobilization in jaw fractures (dental, gingival, gingival).
26. Types and methods of osteosynthesis of bones of the facial skull.
27. Indications for carrying out osteosynthesis of the bones of the facial skull.
28. Preparation of the patient for osteosynthesis surgery.
29. Hardware operative methods of osteosynthesis.
30. Classification of fractures of the lower jaw.
31. Clinical picture of fractures of the lower jaw.
32. Methods of diagnosis of fractures of the lower jaw.
33. Temporary immobilization for fractures of the lower jaw.
34. Conservative (orthopedic) methods of permanent immobilization in the treatment of noninflammatory fractures of the lower jaw.
35. Surgical and orthopedic methods of permanent immobilization in the treatment of noninflammatory fractures of the lower jaw.
36. Surgical methods of treatment of injuries of the upper jaw.
37. Classification of fractures of the upper jaw.
38. Clinic of noninflammatory fractures of the upper jaw.
39. Diagnosis of non-inflammatory fractures of the upper jaw.
40. Methods of temporary immobilization in the treatment of noninflammatory fractures of the upper jaw.
41. Conservative (orthopedic) methods of permanent immobilization in the treatment of noninflammatory fractures of the upper jaw.
42. Surgical and orthopedic methods of permanent immobilization in the treatment of noninflammatory fractures of the upper jaw.
43. Surgical methods of treatment of injuries of the upper jaw.
44. Topographic and anatomical features of the middle zone of the face.
45. Statistics and classification of fractures of the nose, zygomatic bone and arch.
46. Fractures of nasal bones, clinic, diagnosis, treatment.
47. Fractures of the zygomatic arch, clinic, diagnosis, treatment. Conservative and surgical methods of treatment.
48. Peculiarities of the postoperative period in trauma 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 of restoring the integrity of the bones of the facial skeleton and post-traumatic defects. Osteoplastic surgery.
57. Peculiarities of rehabilitation of patients with maxillofacial injuries. Medical ethics and deontology.
58. The complex impact of trauma on the body.
59. Traumatic disease, classification of its periods, diagnosis.
60. Clinical manifestations of a traumatic disease, especially in case of damage to the SCD.
61. Complex therapy of traumatic disease, prevention of complications.
62. Traumatic shock, its stages, clinic, diagnosis.
63. Algorithm for providing emergency medical aid in case of traumatic shock, treatment at the stages of medical evacuation.
64. Pre-hospital and hospital care for patients with traumatic shock.
65. Prevention of traumatic shock.
66. "Syndrome of mutual aggravation".
67. Traumatic toxicosis (crash syndrome), "Positional compression syndrome", clinical signs, periods of the course of the disease, local changes in the injured tissue area, first aid and principles of treatment.
68. Classification of complications in the case of SHLD injuries.
69. Asphyxia: types, prevention measures.
70. Traumatic shock: measures of treatment and prevention.
71. Types of bleeding, ways to stop them.
72. Classification of thermal injuries.
73. Peculiarities of thermal damage in SLD.
74. Clinical picture of burns, methods of determining the area of damaged tissues.
75. Treatment of thermal injuries in SCD, prevention of complications.
76. General principles and types of restorative operative interventions in SLD.
77. Burn disease, clinic, diagnosis, principles of assistance.
78. Care of patients with traumatic injuries of the SCD.
79. Indications and contraindications for the use of physical therapy and physiotherapy in patients with traumatic injuries of the SCD.

### STRUCTURE OF THE DISCIPLINE

No	Theme VII semester	Lectures	Practical	Independent work	Individual work
1.	Tumor classification, etiology, pathogenesis, patterns of growth and development of benign tumors, principles of their differential diagnosis and treatment.		3	3	
2.	Benign tumors and tumor-like neoplasms of the soft tissues of SCD (papilloma, fibroma, lipoma, hemangioma, atheroma, neurofibromatosis, dermoid and epidermal cysts, medial and lateral neck cysts, brachiogenic cysts and fistulas): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment and prevention of complications.	2	3	2	

3.	Jaw cysts (odontogenic and non-odontogenic, epithelial and non-epithelial, etc.). Odontogenic cysts of the jaws (root, follicular, submaxillary, paradental, retromolar, etc.): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment and prevention of complications.		3		
4.	Benign odontogenic tumors of the jaws (ameloblastoma (adamantine noma), odontoma, cementoma): classification, histological structure, clinic, differential diagnosis, principles and methods of treatment, prevention of complications.		3	3	
5.	Benign neodontogenic tumors of the jaws (osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, epulid, etc.): classification, histological structure, clinic, differential diagnosis, principles and methods of treatment, prevention of complications. Curation of patients with medical history writing. Independent work of students under the guidance of a teacher.		3	2	
6.	Osteogenic tumor-like neoplasms of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma): classification, histological structure, clinic, differential diagnosis, features of treatment, prevention, complications.		3		
7.	Benign tumors and cysts of salivary glands: classification, histological structure, clinic, differential diagnosis, principles and methods of treatment. Protection of medical history.		3		
8.	Biological signs of clinical oncology. Precancerous diseases and cancer of the skin of the face: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgical, radiation, chemotherapy, immunocorrection, etc.), prevention and prevention of complications.		3	3	
9.	Precancerous diseases and cancer of the lower lip: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgical, radiation, chemotherapy, immunocorrection, etc.), prevention and prevention of complications.		3	3	
10.	Precancerous diseases and cancer of the mucous membrane of the oral cavity and tongue: histological structure, clinical forms, stages, differential diagnosis, treatment, complications and prevention. Malignant tumors of the salivary glands: histological structure, clinical forms, differential diagnosis, treatment.	2	3		
11.	Cancer and sarcoma of the jaws: origin and histological structure, classification, clinic, differential diagnosis, treatment, complications and prevention. Malignant tumors of the neck. ShCD lymphadenopathy.	2	3	3	
12.	Diff. exam		2		

<i>Total VII semester</i>		<b>6</b>	<b>35</b>	<b>19</b>	
<b>No</b>	<b>Topic VIII semester</b>	<b>Lectures</b>	<b>Practical</b>	<b>Independent work</b>	<b>Individual work</b>
1.	The subject and tasks of military dentistry. Organization of surgical care for maxillofacial wounded in the army in peacetime and in extreme conditions. Military medical doctrine. Basic principles of organization, volume and content of assistance to the injured in the maxillofacial region (SHLD). Traumatic disease: pathogenesis, special features in the case of damage to the SCD.	2	3	3	
2.	General characteristics, clinical course, diagnosis of gunshot wounds and damage to soft tissues, facial bones in peacetime, in extreme conditions: classification, features of the clinical course, diagnosis of injuries at the stages of medical evacuation. The influence of violations of facial aesthetics on the psyche of the wounded. Plastic surgery in the treatment of facial injuries. Modern gunshot wound and its treatment.		3	3	
3.	Concomitant complications of SLD damage (bleeding, asphyxia, shock), their prevention. Medical assistance at the site of the injury, at the stages of medical evacuation. Early complications of SCD injuries (syndrome of long-term compression of facial tissues). Medical assistance at the place of injury, at the stages of medical evacuation.		3	3	
4.	Damage to soft tissues of SCD in peacetime, in extreme conditions: classification, clinical course, methods of surgical treatment of wounds, types of sutures. Providing assistance to such wounded at the site of injury, at the stages of medical evacuation, taking into account the aesthetics of the face. Obtaining topics for the preparation of a seminar class (to topic No. 14).		3	3	
5.	Damage to the lower jaw in peacetime, in extreme conditions: anatomy of damage, classification, clinical course, diagnosis, medical assistance to the wounded at the site of injury, at the stages of medical evacuation. Surgical treatment of wounds in case of damage to the lower jaw, principles of plastic surgery. Achievements of domestic scientists, employees of the department.		3		
6.	Injury of the upper jaw in peacetime, in extreme conditions: anatomy of injuries, classification, clinical course, diagnosis, medical assistance to the wounded at the site of injury, at the stages of medical evacuation. Surgical treatment of wounds in case of damage to the upper jaw and principles of plastic surgery. Achievements of domestic scientists, employees of the department.		3		

7.	Damage to the facial bones, nasal bones in peacetime, in extreme conditions: classification, frequency, clinic, diagnosis, treatment. Achievements of domestic scientists, employees of the department. Damage to the bones of the nose in peacetime, in extreme conditions: classification, frequency, clinic, diagnosis, treatment. Achievements of domestic scientists, employees of the department.		3		
8	Temporary (evacuation-transport) immobilization in case of damage to the bones of the facial skull: requirements, types, disadvantages and advantages. Permanent (therapeutic) immobilization of the jaws with dental splints, mouthguards. Achievements of domestic scientists, employees of the department.		3		
9	Permanent (therapeutic) immobilization of the jaws with dental splints, mouthguards in case of damage to the bones of the facial skull: requirements, types, disadvantages and advantages. Achievements of domestic scientists, employees of the department.		3	3	
10	Osteosynthesis, hardware methods of fixation of fragments of facial skull bones. Achievements of domestic scientists, employees of the department. Workshop: regeneration of bone tissue, types. Bone wound healing. Methods of optimizing bone tissue regeneration. Achievements of domestic scientists, employees of the department.		3	3	
11	Thermal injuries of the face in peacetime, in extreme conditions, their consequences, treatment, prevention of complications, possibilities of plastic surgery. Burn disease with facial injuries. Combined lesions of SCD (BOR, RR), pathogenesis, variants of the clinical course depending on the features of the lesion, their treatment.		3	3	
12	Diff. exam		2		
	<b>TOTAL</b>	<b>4</b>	<b>35</b>	<b>21</b>	
	<i>In total for a year</i>	<b>10</b>	<b>70</b>	<b>40</b>	

### Thematic plan of practical classes for the VII semester

1	Tumor classification, etiology, pathogenesis, patterns of growth and development of benign tumors, principles of their differential diagnosis and treatment.	3
2	Benign tumors and tumor-like neoplasms of the soft tissues of SCD (papilloma, fibroma, lipoma, hemangioma, atheroma, neurofibromatosis, dermoid and epidermal cysts, medial and lateral neck cysts, brachiogenic cysts and fistulas): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment and prevention of complications.	3
3	Jaw cysts (odontogenic and non-odontogenic, epithelial and non-epithelial, etc.). Odontogenic cysts of the jaws (root, follicular, submaxillary, paradental, retromolar, etc.): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment and prevention of complications.	3

4	Benign odontogenic tumors of the jaws (ameloblastoma (adamantine noma), odontoma, cementoma): classification, histological structure, clinic, differential diagnosis, principles and methods of treatment, prevention of complications.	3
5	Benign neodontogenic tumors of the jaws (osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, epulid, etc.): classification, histological structure, clinic, differential diagnosis, principles and methods of treatment, prevention of complications. Curation of patients with medical history writing. Independent work of students under the guidance of a teacher.	3
6	Osteogenic tumor-like neoplasms of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma): classification, histological structure, clinic, differential diagnosis, features of treatment, prevention, complications.	3
7	Benign tumors and cysts of the salivary glands: classification, histological structure, clinic, differential diagnosis, principles and methods of treatment. Protection of medical history.	3
8	Biological signs of clinical oncology. Precancerous diseases and cancer of the skin of the face: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgical, radiation, chemotherapy, immunocorrection, etc.), prevention and prevention of complications.	3
9	Precancerous diseases and cancer of the lower lip: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgical, radiation, chemotherapy, immunocorrection, etc.), prevention and prevention of complications.	3
10	Precancerous diseases and cancer of the mucous membrane of the oral cavity and tongue: histological structure, clinical forms, stages, differential diagnosis, treatment, complications and prevention. Malignant tumors of the salivary glands: histological structure, clinical forms, differential diagnosis, treatment.	3
11	Cancer and sarcoma of the jaws: origin and histological structure, classification, clinic, differential diagnosis, treatment, complications and prevention. Malignant tumors of the neck. ShCD lymphadenopathy.	3
12	Diff. exam	2
	<b>In total</b>	<b>35</b>

#### **Thematic plan of practical classes for the 7th and 1st semester**

1	The subject and tasks of military dentistry. Organization of surgical care for maxillofacial wounded in the army in peacetime and in extreme conditions. Military medical doctrine. Basic principles of organization, volume and content of assistance to the injured in the maxillofacial region (SHLD). Traumatic disease: pathogenesis, special features in the case of damage to the SCD.	3
2	General characteristics, clinical course, diagnosis of gunshot wounds and damage to soft tissues, facial bones in peacetime, in extreme conditions: classification, features of the clinical course, diagnosis of injuries at the stages of medical evacuation. The influence of violations of facial aesthetics on the psyche of the wounded. Plastic surgery in the treatment of facial injuries. Modern gunshot wound and its treatment.	3
3	Concomitant complications of SLD damage (bleeding, asphyxia, shock), their prevention. Medical assistance at the site of the injury, at the stages of medical evacuation. Early complications of SCD injuries (syndrome of long-term compression of facial tissues). Medical assistance at the place of injury, at the stages of medical evacuation.	3
4	Damage to soft tissues of SCD in peacetime, in extreme conditions: classification, clinical course, methods of surgical treatment of wounds, types of sutures. Providing assistance to such wounded at the site of injury, at the stages of medical evacuation, taking into account the aesthetics of the face. Obtaining topics for the preparation of a seminar class (to topic No. 14).	3
5	Damage to the lower jaw in peacetime, in extreme conditions: anatomy of damage, classification, clinical course, diagnosis, medical assistance to the wounded at the site of	3

	injury, at the stages of medical evacuation. Surgical treatment of wounds in case of damage to the lower jaw, principles of plastic surgery. Achievements of domestic scientists, employees of the department.	
6	Injury of the upper jaw in peacetime, in extreme conditions: anatomy of injuries, classification, clinical course, diagnosis, medical assistance to the wounded at the site of injury, at the stages of medical evacuation. Surgical treatment of wounds in case of damage to the upper jaw and principles of plastic surgery. Achievements of domestic scientists, employees of the department.	3
7	Damage to the facial bones, nasal bones in peacetime, in extreme conditions: classification, frequency, clinic, diagnosis, treatment. Achievements of domestic scientists, employees of the department. Damage to the bones of the nose in peacetime, in extreme conditions: classification, frequency, clinic, diagnosis, treatment. Achievements of domestic scientists, employees of the department.	3
8	Temporary (evacuation-transport) immobilization in case of damage to the bones of the facial skull: requirements, types, disadvantages and advantages. Permanent (therapeutic) immobilization of the jaws with dental splints, mouthguards. Achievements of domestic scientists, employees of the department.	3
9	Permanent (therapeutic) immobilization of the jaws with dental splints, mouthguards in case of damage to the bones of the facial skull: requirements, types, disadvantages and advantages. Achievements of domestic scientists, employees of the department.	3
10	Osteosynthesis, hardware methods of fixation of fragments of facial skull bones. Achievements of domestic scientists, employees of the department. Workshop: regeneration of bone tissue, types. Bone wound healing. Methods of optimizing bone tissue regeneration. Achievements of domestic scientists, employees of the department.	3
11	Thermal injuries of the face in peacetime, in extreme conditions, their consequences, treatment, prevention of complications, possibilities of plastic surgery. Burn disease with facial injuries. Combined lesions of SCD (BOR, RR), pathogenesis, variants of the clinical course depending on the features of the lesion, their treatment.	3
12	Diff. exam	2
	<b>In total</b>	<b>35</b>

**Thematic plan of students' independent work for the VII - VIII semester**  
**Students' independent work involves the study of the following topics:**

No	Topics	Hours	type of control
<i>Content module "Surgical dentistry of extreme conditions and military maxillofacial surgery"</i>			
1.	Provision of emergency medical aid for traumatic, painful shock at the stages of treatment.	3	Writing abstracts, presentation
2.	Provision of emergency medical aid for various types of asphyxiation.	3	Writing abstracts, presentation
3.	Modern methods of treatment of the syndrome of long-term compression of facial tissues (extracorporeal hemosorption, plasmaphoresis, etc.), neurological changes after trauma.	3	Writing abstracts, presentation
4.	Retrospective analysis of damage to the muscles and tissues of SCD in peacetime, in extreme conditions, and during wartime.	3	Analysis of literature
5.	Types of sutures in the surgical treatment of wounds of some tissues of SCD	3	Writing abstracts, presentation
6.	Burn disease with damage to the face	3	Writing abstracts, presentation

7.	Post-surgical (therapeutic) immobilization of the jaws. Regeneration of bone tissue	3	Writing abstracts, presentation
<b>Content module "Oncology ShLD"</b>			
1.	Oncogenesis. Modern views on the biological basis of oncogenesis.	3	Writing abstracts, presentation
2.	Biological principles of treatment of benign and malignant tumors of SCD.	3	Writing abstracts, presentation
3.	The immune system in tumors and tumor-like formations of SCD.	3	Analysis of literature
4.	Methods of examination of patients with tumor and tumor-like formations of SCD. Biopsy.	3	Writing abstracts, presentation
5.	Differential diagnosis of benign and malignant tumors of SCD. Differential diagnosis of SLD ulcers.	2	Writing abstracts, presentation
6.	Modern methods of treatment of hemangiomas of soft and hard tissues of SCD. Modern methods of diagnosis and differential diagnosis of lymphadenopathy of SCD.	2	Writing abstracts, presentation
7.	Modern methods of treatment of malignant tumors of soft tissues. Modern methods of treatment of malignant tumors of the jaws. Elimination of bone defects of SHLD after removal of tumors.	3	Writing abstracts, presentation
<b>Total hours: 40</b>			

**7. Individual tasks** - not planned in the working curriculum.

**8. Teaching methods.**

The educational process at the department of surgical stomatology and maxillofacial surgery is organized according to the following regulatory documents:

- of the Law of Ukraine "On Higher Education" dated July 1, 2014 No. 1556- VII ;
- Resolution of the Cabinet of Ministers of Ukraine dated April 29, 2015 No. 266 "On approval of the list of fields of knowledge and specialties for which higher education applicants are trained";  
order of the Ministry of Education and Culture of Ukraine No. 1151 dated 06.01.2015 "On the specifics of introducing the list of fields of knowledge and specialties for which higher education applicants are trained, approved by Resolution No. 266 of the Cabinet of Ministers of Ukraine dated 29.04.2015";  
order of the Ministry of Education and Culture of Ukraine No. 47 dated 26.01.2015 "On the peculiarities of the formation of educational plans", registered with the Ministry of Justice of Ukraine on 04.02.2015 under No. 132/26577;
- letter of the Ministry of Health of Ukraine dated July 25, 2016 No. 08.01-30/19087;
- of the curriculum of the discipline "surgical stomatology" for students of the III , IV and V courses of the Faculty of Dentistry.

Practical clinical classes in surgical stomatology and SCLH are held with groups of 13-15 people each. The initial level of knowledge of a student who starts studying at the department of surgical stomatology involves determining the level of knowledge in anatomy, general and special physiology, pathological anatomy and physiology based on fundamental training at the departments of medical and biological and general clinical profile.

At lectures and practical classes, teachers highlight the achievements of scientific and technical progress, medicine, in particular, surgical dentistry and ALS and their implementation in practice.

In the lecture courses, the main and most complex sections of surgical dentistry and ACL are taught, including the problems of the relationship of all sections of dentistry with general pathology, ecology, etiology and pathogenesis of various dental and somatic diseases, nosological diagnosis, surgical and conservative treatment, prevention, social and labor rehabilitation and examination.

In order to master the manual skills of providing surgical dental care, along with the study of theoretical issues, students practice manipulations on phantoms and dummies, under the guidance and control of the teacher, independently conduct an examination of patients with various pathological processes of SLD, related to the competence of surgical dentistry and SLD, independently study symptoms of surgical dental diseases, acquire skills in the diagnosis of maxillofacial disorders and diseases, their treatment, examination and labor rehabilitation.

**The method of organizing the educational process in a practical session on surgical dentistry:**

### **1. Preparatory stage, 20 min.**

The teacher's justification of the importance of the topic of the lesson for further study of the discipline and professional activity of the doctor in order to form motivation and purposeful educational activities. Acquaintance of students with specific goals and lesson plan.

Carrying out standardized control of the initial level of student preparation, discussion and answers to students' questions.

### **2. The main stage, 40 min.**

Collection of anamnesis by students and examination of the thematic patient. Students draw up a patient examination plan, a plan for additional research methods, fill out relevant medical documentation, practice the technique of diagnostic manipulations, therapeutic measures, practice practical skills in accordance with the subject of the lesson.

### **3. The final stage, 3 min.**

Carrying out standardized final control using individual test tasks and questions (10-15 min.), checking works (5-10 min.). The teacher's assessment of the student's current activity during the lesson, taking into account the standardized final control, conducting an analysis of student success, announcing the assessment of each student's activity and displaying it in the journal of attendance and student success.

The head of the group at the same time enters grades into the record of students' success and class attendance, the teacher certifies them with his signature.

Briefly informing students about the topic of the next class and methodical measures to prepare for it.

Students have the opportunity to familiarize themselves with the list of practical skills that they must master in the 3rd year. Practical skills are posted on educational and methodical stands and the department's website. The department has worked out a form of control of the acquisition of practical skills, which every student receives at the beginning of the academic semester. During practical classes, as well as at the end of the semester, the teacher makes appropriate markings and signatures about the students' mastery of the list of practical skills.

Independent work of students is reflected in educational and thematic plans, as well as in methodical development of practical classes for students. Students have the opportunity to familiarize themselves with the main and additional literature on the discipline, prepare orally, as well as write essays, etc.

Rehearsals of practical (seminar) classes are held during teacher shifts, as well as according to an individual schedule. Schedules of practical lessons are posted on the relevant stands and on the department's information website. Students who have missed more than two practical classes are allowed to study with the permission of the dean's office of the Faculty of Dentistry, and must also complete the missed classes within the next two weeks. The control over the revisions of practical classes is carried out in the corresponding stitched journal with end-to-end numbering and fixing the date of passing the revision, which corresponds to the schedule. Missing lectures is recorded in the relevant journals, monitored during practical classes in the form of an oral and written survey, and is also taken into account when assigning credits and examination evaluation.

All classes and lectures are provided with appropriate methodical and illustrated material. Classes are held in the traditional method using test tasks, control tasks, oral answers. Dummies available at the department are widely used during classes.

The teachers of the department have carried out significant work on the creation of methodological materials to ensure the educational process, materials for preparing for practical classes and lectures in an electronic version, which is posted on the website of the department of surgical dentistry and ENT, a database of test tasks for current and final control of knowledge has been created. Visualization of algorithms for performing practical skills is also provided with video presentations from the sections: "Traumatology of SLD", "Surgical dentistry of extreme conditions and military maxillofacial surgery", "Oncology of SLD".

### Innovative methods and technologies used in the educational process

Discipline	Names of pedagogical technologies and innovative teaching methods
Surgical dentistry	<ul style="list-style-type: none"> <li>- involving students in working with well-known electronic databases of medical information (ScienceDirect, PubMed, Panteleimon, etc.) via the Internet;</li> <li>- the use of an interdisciplinary approach to the study of surgical dentistry in the pedagogical process - constant emphasis of students on the connection of the subject with basic disciplines and related dental specialties;</li> <li>- involvement of students in assistance during operations, online broadcasting of operations in the methodical office thanks to the available modern video equipment with synchronous discussion of the performed manipulations;</li> <li>- systematic examinations with students of thematic patients and discussion of clinical cases, motivation of students to draw up algorithms of diagnostic and therapeutic measures under the conditions of one or another dental surgical pathology.</li> </ul>

#### 9. Control methods.

Control measures are a necessary element of feedback in the learning process. They determine the compliance of the level of knowledge, skills and abilities acquired by students with the requirements of normative documents on higher education.

Control measures include current control, final control - semester differential assessment (fall semester), semester differential assessment (spring semester).

Before studying a new course, in order to determine the level of preparation of students in the disciplines that provide this course, entrance control is conducted. Entrance control is carried out at the first lesson on tasks corresponding to the program of the previous discipline. The results of control are analyzed at departmental (inter-departmental) meetings and meetings of methodical commissions together with scientific and pedagogical workers who conduct classes on the discipline. Based on the results of the entrance control, measures are being developed to provide individual assistance to students, and to adjust the educational process.

Current control is carried out at each practical lesson in accordance with the specific goals of each topic. Current control is carried out on the basis of a comprehensive assessment of the student's activity, which includes control of the input level of knowledge, the quality of practical work, the level of theoretical training, the performance of independent work according to the thematic plan, and the results of the initial control of the level of knowledge.

When evaluating students' educational activity, preference is given to standardized control methods: test tasks, situational tasks, control questions, oral survey, structured written works, structured according to algorithms control of practical skills in conditions close to real ones.

Final control - semester credit - is a form of final control, which consists in evaluating the student's learning of the educational material solely on the basis of the results of his performance of certain types of work in practical classes. 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 (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** is carried out during training sessions and aims to check students' assimilation of educational material, the level of theoretical and practical training. Forms of ongoing control - testing, solving situational problems, solving a clinical situational problem, demonstrating practical skills or abilities, answering standardized theoretical questions. The forms of evaluation of the current educational activity are standardized and correspond to the standards of answers.

*10.1. Assessment of current educational activities.* During the evaluation of the mastery of each topic for the current educational activity, the student is given grades on a 4-point scale (national). At the same time, all types of work provided for by the discipline program are taken into account. The student must receive a grade on each topic for further conversion of grades into points on a multi-point (200-point) scale.

Assessment of the current performance of students is carried out at each practical session and is entered in the journal of academic performance.

Students' knowledge is assessed both from theoretical and practical training according to the following

criteria:

- **"excellent"** - the student mastered the theoretical material flawlessly, demonstrates deep and comprehensive knowledge of the relevant topic or academic discipline, the main provisions of scientific primary sources and recommended literature, thinks logically and constructs an answer, freely uses the acquired theoretical knowledge when analyzing practical material, expresses his attitude to those or other problems, demonstrates a high level of assimilation of practical skills;
- **"good"** - the student has mastered the theoretical material well, has the main aspects from the primary sources and recommended literature, presents it in a reasoned manner; has practical skills, expresses his thoughts on certain problems, but certain inaccuracies and errors are assumed in the logic of the presentation of theoretical content or in the analysis of practical ones;
- **"satisfactory"** - the student has basically mastered the theoretical knowledge of the academic topic or discipline, orients himself in the primary sources and recommended literature, but answers unconvincingly, confuses concepts, additional questions cause the student uncertainty or lack of stable knowledge; when answering questions of a practical nature, reveals inaccuracies in knowledge, does not know how to evaluate facts and phenomena, connect them with future activities;
- **"unsatisfactory"** - the student has not mastered the educational material of the topic (discipline), does not know scientific facts, definitions, hardly orients himself in primary sources and recommended literature, lacks scientific thinking, practical skills are not formed.

### 10. The form of final control of study success

#### **Autumn semester - semester diff. test.**

Final control - semester assessment is carried out for the purpose of evaluating the results of studies according to the national scale and the ECTS scale.

Semester assessment of subjects is carried out after the end of its study, before the beginning of the examination session.

Students who have attended all the classroom training sessions provided for by the curriculum in the discipline and have scored at least the minimum number of points for their current performance are admitted to the final examination. For students who have missed classes, with the permission of the dean's office, it is allowed to work off the academic debt by a certain defined term within the semester.

Credits are accepted by teachers who conducted practical classes in the study group or gave lectures on this discipline.

A student is considered admitted to the semester control if he has completed all types of work and tasks provided for in the curriculum.

The results of the evaluation of the student's work during the semester must be documented (entered in the academic journal, credit and examination information, the student's credit book). Tests and individual assignments completed by students during the semester are stored at the department throughout the year.

#### **Spring semester - semester differential credit**

Students who have attended all the classroom training sessions provided for by the curriculum in the discipline and have scored at least 72 points for their current performance are admitted to the semester differential credit.

#### **The scheme of accrual 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.

*The maximum number of points* that a student can score for the current educational activity while studying the discipline is 200 points.

*The minimum number of points* that a student must score for the current educational activity in order to enroll in the discipline is 120 points.

For convenience, a calculation table is provided on a 120-point scale:

#### **Recalculation of the average grade for the current activity into a multi-point scale for disciplines ending with a differential credit**

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 3	Insufficien t
4.54	109	3.99	96	3.45	83		
4.5	108	3.95	95	3.41	82		

*Independent work of students* is evaluated during the current control of the topic in the corresponding lesson. The learning of topics that are assigned only to independent work is controlled during the final control.

Evaluation of disciplines, the form of final control of which is diff. **credit** is based solely on the results of the current educational activity. To be enrolled, a student must receive at least 60% of the maximum number of points in the discipline (122 points) for the current educational activity. Subject points are ranked on the ECTS scale according to the scheme described above.

A grade of F (unsatisfactory with mandatory retake) on credit or differential credit is given to students who have attended all classroom classes in the discipline but have not earned the minimum number of points for the current academic activity. Such students do not receive credit and are not allowed to take the exam session.

Discipline points for students who have successfully completed the program are converted to a traditional 4-point scale according to the absolute criteria, which are shown in the table below:

The grade for differential credit corresponds to the scale:

grade "5" - 80-71 points

grade "4" - 70-61 points

grade "3" - 60-50 points

The grade for the discipline consists of the sum of the points for the current success rate and the differential credit. The obtained points correspond to the fixed rating scale according to the "Instructions for evaluating exams and differential credits", adopted by the decision of the *Department of Dentistry* of the International Academy of Ecology and Medicine, **Protocol No. 1 dated August 30, 2017**.

#### Rating scale: national and ECTS

The sum of points for all types of educational activities	Evaluation on a national scale	
	for an exam, course project (work), practice	for credit
180-200A	perfectly	counted
170-179 B	fine	
150-169 C		
130 -149 D		
122-129 E	satisfactorily	
FX	unsatisfactory with the possibility of reassembly	not counted with the possibility of retaking
F	unsatisfactory with mandatory repeated study of the discipline	not enrolled with mandatory repeated study of the discipline

Points of students studying in one specialty, taking into account the number of points scored in the discipline, are ranked on the ECTS scale as follows:

ECTS	Statistical indicator
A	The best 10% of students
B	The next 25% of students
C	The next 30% of students
D	The next 25% of students
E	The last 10% of students

Ranking with the assignment of grades "A", "B", "C", " D ", "E" is carried out for students of this course who are studying in one specialty and have successfully completed the study of the discipline. Students who received grades FX , F ("2") are not listed as ranked students. Students with an FX grade automatically receive an "E" grade after retaking.

The objectivity of the evaluation of students' educational activity is checked by statistical methods (correlation coefficient between the ECTS grade and the grade on the national scale).

**12. Methodological support:** notes, extended plans and multimedia presentations of lectures, plans for 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.

**List of practical skills for the content module No. 1 "Traumatology of SCD":**

1. Make a plan for the examination of a patient with damage to the SCD.
2. Practice the PHO technique on a phantom.
3. Work out the technique of temporarily stopping bleeding.
4. To master the technique of examination of a patient with a fracture of the lower jaw.
5. To learn the technique of palpation of the lower jaw in a patient with a suspected traumatic fracture of the lower jaw.
6. Learn how to interpret radiographs.
7. Learn how to make a drug treatment plan.
8. Master the technique of conducting a clinical examination of a patient with fractures of the upper jaw.
9. To learn to detect characteristic clinical symptoms in patients with fractures of the upper jaw.
10. Assign additional research methods.
11. Correctly interpret the results of instrumental research methods.
12. Learn to draw up a complex treatment plan depending on the complexity of the case.
13. To master the basic methods of examination of a patient with a fracture of the zygomatic bone, arch and bones of the nose in peacetime.
14. Conduct or prescribe additional methods of examination of a patient with a fracture of the zygomatic bone, arch and nasal bones in peacetime.
15. Make a treatment plan for a patient with a fracture of the zygomatic bone, arch and nasal bones in peacetime.
16. Master the skills of making and applying temporary transport bandages.
17. Master the skills of ligature tying of teeth.
18. Master the skills of applying standard and individual tires.
19. Master the technique of bone suture.
20. Master the technique of applying miniplates to bone fragments.
21. Describe the control radiograph regarding the correctness of repositioning and fixation of fragments.
22. Learn to identify characteristic clinical symptoms that indicate regeneration disorders.
23. To learn to recognize signs of impaired reparative regeneration on radiographs.
24. Prescribe complex medical treatment aimed at improving reparative osteogenesis.
25. To master the method of examination of a patient with a gunshot injury to the bones of the face.
26. Make a plan for the examination of a patient with a traumatic disease.
27. Draw up a plan for medical treatment of traumatic shock.
28. To examine a patient with complications of traumatic injuries of the maxillofacial area.
29. Stop the bleeding by suturing the vessel.
30. Write a treatment plan for a patient with delayed consolidation of fragments.
31. Examine a patient with maxillofacial burns.
32. Calculate the area of tissue damage.
33. Draw up a treatment plan for a patient with maxillofacial burns.
34. Make an examination plan for a patient with a combined lesion.
35. Draw up a priority scheme for providing medical care to patients with combined injuries.
36. Draw schemes for the introduction of food probes.
37. To draw up a plan of measures for the care of severely injured bedridden patients.

**List of practical skills for the content module No. 2 and No. 3 "Surgical dentistry of extreme conditions and military maxillofacial surgery" "Oncology ShLD":**

1. Draw up a plan-scheme for the organization of providing medical assistance to maxillofacial wounded at the stages of medical evacuation.
2. Draw up a comprehensive treatment plan for patients with gunshot wounds.
3. Be able to collect anamnesis and conduct an examination of patients with benign and malignant tumors of the

maxillofacial area, tumor-like formations.

4. Be able to draw up an examination plan for patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
5. Be able to draw up a diagnostic plan and interpret additional examination methods in patients with tumor-like neoplasms of soft tissues of SCD.
6. Be able to perform a diagnostic puncture.
7. Be able to perform an incisional biopsy.
8. Be able to perform an excisional biopsy.
9. Be able to determine the indications and contraindications for surgical treatment of benign and malignant tumors, tumor-like and precancerous diseases of SCD.
10. Be able to draw up a plan and volume of drug therapy for patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
11. Be able to make a plan and volume of postoperative drug therapy.
12. Be able to perform diathermocoagulation and cryodestruction.
13. To be able to diagnose complications that may arise after surgical treatment of benign and malignant tumors, tumor-like formations of SCD.
14. To be able to draw up a plan of complex treatment of patients with malignant diseases of SCD.

**List of questions for self-control for the content module No. 1 "Traumatology of SCD":**

1. The main provisions of the military medical doctrine.
2. First aid for the injured in the maxillofacial area.
3. Pre-medical medical care.
4. First medical aid.
5. Qualified medical assistance.
6. Specialized medical assistance.
7. Classification of injuries of the soft tissues of the face in peacetime and wartime.
8. Contusion of the soft tissues of the face - clinic, diagnosis, first aid.
9. Cuts and wounds of soft tissues of the face (bruised, torn, cut, stabbed, chopped, bitten, crushed, scalped) - clinic, diagnosis, first aid.
10. Features of the clinical picture of soft tissue wounds depending on their localization.
11. The main principles of conducting PHO of wounds on the face.
12. Characteristic features of the soft tissues of SCD affecting wound healing processes.
13. Medicinal methods of wound treatment in the postoperative period.
14. Physiotherapy methods of wound treatment.
15. Types of seams and suture material. Plate seams: purpose and modifications.
16. Plastic surgery in the treatment of facial wounds.
17. Methods of immobilization of fragments of facial skull bones.
18. Methods of temporary immobilization.
19. Selection of methods of fixation of fragments.
20. Indications and contraindications for ligature binding of teeth and jaws.
21. The technique of ligature tying of teeth and jaws (according to Ivy, Limberg, Gotsk, etc.).
22. Types of permanent immobilization for fractures of the bones of the facial skull.
23. Types of splints used for permanent immobilization in jaw fractures (dental, gingival, gingival).
24. Types and methods of osteosynthesis of bones of the facial skull.
25. Indications for carrying out osteosynthesis of the bones of the facial skull.
26. Preparation of the patient for osteosynthesis surgery.
27. Hardware operative methods of osteosynthesis.
28. Classification of fractures of the lower jaw.
29. Clinical picture of fractures of the lower jaw.
30. Methods of diagnosing fractures of the lower jaw.
31. Temporary immobilization for fractures of the lower jaw.
32. Conservative (orthopedic) methods of permanent immobilization in the treatment of noninflammatory fractures of the lower jaw.
33. Surgical and orthopedic methods of permanent immobilization in the treatment of noninflammatory fractures of the lower jaw.
34. Surgical methods of treatment of injuries of the upper jaw.
35. Classification of fractures of the upper jaw.
36. Clinic of noninflammatory fractures of the upper jaw.
37. Diagnosis of non-inflammatory fractures of the upper jaw.

38. Methods of temporary immobilization in the treatment of noninflammatory fractures of the upper jaw.
39. Conservative (orthopedic) methods of permanent immobilization in the treatment of noninflammatory fractures of the upper jaw.
40. Surgical and orthopedic methods of permanent immobilization in the treatment of noninflammatory fractures of the upper jaw.
41. Surgical methods of treatment of injuries of the upper jaw.
42. Topographic and anatomical features of the middle zone of the face.
43. Statistics and classification of fractures of the nose, zygomatic bone and arch.
44. Fractures of nasal bones, clinic, diagnosis, treatment.
45. Fractures of the zygomatic arch, clinic, diagnosis, treatment. Conservative and surgical methods of treatment.
46. Peculiarities of the postoperative period in trauma 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 of restoring the integrity of the bones of the facial skeleton and post-traumatic defects. Osteoplastic surgery.
55. Peculiarities of rehabilitation of patients with maxillofacial injuries. Medical ethics and deontology.
56. The complex impact of trauma on the body.
57. Traumatic disease, classification of its periods, diagnosis.
58. Clinical manifestations of a traumatic disease, especially in case of damage to the SCD.
59. Complex therapy of traumatic disease, prevention of complications.
60. Traumatic shock, its stages, clinic, diagnosis.
61. Algorithm for providing emergency medical aid in case of traumatic shock, treatment at the stages of medical evacuation.
62. Pre-hospital and hospital care for patients with traumatic shock.
63. Prevention of traumatic shock.
64. "Syndrome of mutual aggravation".
65. Traumatic toxicosis (crash syndrome), "Positional compression syndrome", clinical signs, periods of the course of the disease, local changes in the injured tissue area, first aid and principles of treatment.
66. Classification of complications in the case of SHLD injuries.
67. Asphyxia: types, prevention measures.
68. Traumatic shock: measures of treatment and prevention.
69. Types of bleeding, ways to stop them.
70. Classification of thermal injuries.
71. Peculiarities of thermal damage in SLD.
72. Clinical picture of burns, methods of determining the area of damaged tissues.
73. Treatment of thermal injuries in SCD, prevention of complications.
74. General principles and types of restorative operative interventions in SLD.
75. Burn disease, clinic, diagnosis, principles of assistance.
76. Defining what combined damage is.
77. Definition of what are toxic warfare agents.
78. Definition of what radioactive substances are.
79. Classification of combined injuries.
80. Pathogenesis of combined injuries.
81. Variants of the clinical course of combined lesions of SCD.
82. Prevention of complications in patients with combined damage of the SCD.
83. The concept of radiation sickness.
84. Features of the clinical course of radiation sickness depending on the degree of severity. Features of treatment depending on the degree of severity.
85. Organization of nutrition of the wounded in the maxillofacial area.
86. Organization of care for the injured in the maxillofacial area.
87. Indications and contraindications for the use of exercise therapy and physiotherapy in the maxillofacial region.

**List of questions for self-monitoring for the content module #2 and #3 "Surgical dentistry of extreme conditions and military maxillofacial surgery" "Oncology of the ShLD":**

1. The subject and tasks of surgical stomatology and maxillofacial surgery in extreme situations.
2. Organization of surgical dental care in the system of civil care.
3. Organization of surgical dental care in the Armed Forces of Ukraine in peacetime.
4. Principles of the organization of the staged evacuation system for the treatment of the wounded during military operations.
5. Principles of medical triage of wounded with gunshot injury of soft tissues of the face.
6. Medical assistance to the wounded at the scene of injury and at the stages of medical evacuation.
7. The influence of violations of facial aesthetics on the psyche of the wounded.
8. Classification of facial gunshot wounds.
9. Characteristics of gunshot wounds to 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 determination of the severity of the injury.
12. The scope of providing first aid to victims with facial gunshot wounds.
13. The sequence of treatment and evacuation measures during the mass admission of patients with gunshot wounds to the face.
14. Principles of medical sorting of patients with gunshot wounds.
15. Conservative and surgical methods of treatment of gunshot wounds of the maxillofacial area.
16. Etiological factors causing the occurrence of maxillofacial tumors. Types of carcinogens.
17. Theories of the origin of tumors. Phases of carcinogenesis.
18. Classifications of tumors of the maxillofacial region.
19. Classification and features of benign tumors of the maxillofacial area.
20. Comparative characteristics of benign and malignant tumors.
21. The main methods of diagnosing tumors of the maxillofacial area.
22. Definition of the concept of "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 tumors of SCD.
28. Etiopathogenesis of odontogenic tumors of the jaws.
29. Pathanatomy of various types of odontogenic tumors.
30. Clinical manifestations of ameloblastoma, diagnosis, differential diagnosis, treatment.
31. Peculiarities of clinical manifestations, diagnosis, differential diagnosis and treatment with odontology.
32. Clinic, diagnosis, differential diagnosis and treatment with cement.
33. Epulis. Clinic, diagnosis, differential diagnosis, treatment.
34. Classification of benign tumors of the jaw bones.
35. Etiopathogenesis of benign jaw tumors.
36. Features of the clinical course of benign tumors of the jaws.
37. Methods of diagnosis of benign tumors of the jaws.
38. Methods of treatment and rehabilitation of patients with benign tumors of the jaws.
39. Principles of preventing the development of complications in patients with the specified pathology.
40. Etiology and pathogenesis of osteogenic neoplasms of the jaws.
41. Basic diagnostic methods, differential diagnosis.
42. Clinical manifestations at all stages of the clinical course of osteogenic tumor-like neoplasms of the jaws.
43. Methods of surgical treatment of osteogenic tumor-like neoplasms of the jaws.
44. Complications, causes of their occurrence. Preventive measures to prevent the occurrence of this pathology.
45. Etiopathogenesis of benign tumors of soft tissues of SCD.
46. Classification of neoplasms of soft tissues of SCD.
47. Clinical manifestations, diagnosis, treatment of benign connective tissue tumors.
48. Clinical manifestations, diagnosis, treatment of benign tumors from adipose tissue.
49. Clinical manifestations, diagnosis, treatment of benign neurogenic tumors and tumor-like formations.
50. Principles of preventing the development of complications in patients with benign tumors of soft tissues of SCD.
51. Classification of benign vascular tumors of soft tissues of SCD.
52. Etiopathogenesis of benign vascular tumors of soft tissues of SCD: hemangioma and lymphangioma.
53. Clinical manifestations, diagnosis, treatment of hemangiomas.

54. Clinical manifestations, diagnosis, treatment of lymphangioma.
55. Principles of preventing the development of complications in patients with vascular tumors of soft tissues.
56. Pathomorphology of congenital tumor-like neoplasms.
57. Clinical manifestations, diagnosis, treatment of dermoid and epidermoid cysts.
58. Clinical manifestations, diagnosis, treatment of median cysts and fistulas of the neck.
59. Clinical manifestations, diagnosis, treatment of lateral cysts and fistulas of the neck.
60. Differential diagnosis of congenital tumor-like formations.
- 6E Principles of treatment of congenital tumor-like formations.
62. Prevention of complications.
63. Retention cysts of small salivary glands.
64. Retention cysts of the sublingual salivary glands (ranulae).
65. Cysts of the submandibular salivary gland.
66. Cysts of the parotid salivary gland.
67. Oncocytosis.
68. Küttner's syndrome.
69. Clinic, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumor).
70. Clinic, diagnosis and treatment of adenolymphoma (Wortin's tumor)
- 7L Clinic, diagnosis and treatment of oxyphilic adenoma (oncocytoma).
72. Clinic, diagnosis and treatment of non-epithelial salivary gland tumors.
73. Surgical treatment of benign salivary gland tumors.
74. Etiology, pathogenesis of precancerous conditions.
75. Classifications of precancerous conditions.
76. Morphological and clinical diagnosis of precancerous conditions.
77. Methods of examination of patients with precancerous conditions.
78. Clinic, diagnosis, treatment of precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue.
79. Differential diagnosis of obligate and facultative forms of precancerous diseases.
80. Peculiarities of the histological structure of precancerous diseases of the skin of the face, mucous membrane of the oral cavity and tongue.
81. Prevention of precancerous conditions.
82. Dispensary observation of patients with precancerous conditions.
83. The mechanism of tumorigenesis of cells and further tumor development.
84. Biological carcinogens.
85. Stages (phases) of carcinogenesis.
86. The mechanism of antitumor resistance of the body.
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 of ionizing radiation on a malignant tumor cell.
91. Effect of cryotherapy on malignant tumor cells.
92. The effect of hyperthermia on a malignant tumor cell.
93. Effect of chemotherapy drugs on a malignant tumor cell.
94. The effect of oxygenation on a malignant tumor cell.
95. The effect of ultrasound on a malignant tumor cell.
96. The effect of hypoxia on a malignant tumor cell.
97. Immunotherapy of patients with malignant tumors.
98. Complex 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 cervical spine and neck.
101. Clinic, diagnosis and treatment of melanoma.
102. Clinic, diagnosis and treatment of basal cell carcinoma.
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.
- Yub. Clinical and morphological classification of salivary gland tumors.
107. Mucoepidermoid cancer of the salivary glands, clinical manifestations, diagnosis, treatment.
108. Adenocarcinoma and cylindroma, clinical manifestations, diagnosis, treatment.

109. Clinic, diagnosis, treatment of salivary gland sarcoma.
110. Precancerous conditions.
111. Epidemiology, etiopathogenesis of malignant tumors of the jaws.
112. Pathanatomy of cancer and sarcoma of the jaws.
113. Clinical manifestations of cancer (carcinoma) of the upper jaw, diagnosis, treatment.
114. Clinical manifestations of cancer of the lower jaw, diagnosis, treatment.
115. Clinic, diagnosis, treatment of sarcoma of the upper jaw.
116. Clinic, diagnosis, treatment of sarcoma of the lower jaw.
117. Surgical treatment of malignant tumors of the jaws.

#### **A list of knowledge and practical skills for the preparation of the semester differential assessment**

1. Be able to collect an anamnesis and conduct a clinical examination of the patient, correctly draw up a medical history, establish a diagnosis and prescribe treatment.
2. Be able to perform any type of local anesthesia in the maxillofacial area.
3. Perform a typical tooth extraction operation.
4. Perform an atypical tooth extraction operation.
5. Self-perform an autopsy for periostitis and carotid abscess.
6. Be able to stop bleeding after tooth extraction.
7. Establish a diagnosis and provide assistance to a patient with alveolitis and alveoloneuritis.
8. Be able to operate on the sharp edge of the fossa.
9. Examine the patient with hematoma, contracture and prescribe treatment.
10. Examine a patient with pericoronitis, establish a diagnosis and provide assistance (dissection of the mucous membrane, removal of it or a wisdom tooth).
11. Examine a patient with sinusitis, establish a diagnosis and prescribe treatment.
12. Establish a diagnosis and provide assistance in case of perforation of the maxillary sinus.
13. Be able to conduct an examination, formulate a diagnosis for salivary gland disease.
14. To be able to perform ablation of the ducts of the salivary glands.
15. Be able to examine a patient with phlegmon, establish a diagnosis and prescribe treatment.
16. Examine a patient with a tumor, establish a diagnosis and prescribe treatment.
17. Be able to perform a puncture or take material for cytological or histological examination.
18. Examine a patient with a maxillofacial injury, establish a diagnosis and prescribe treatment.
19. To be able to carry out primary surgical treatment of a wound.
20. Carry out temporary immobilization of fragments of the lower and upper jaws.
21. Be able to correct dental splints, treatment of the oral cavity.
22. To be able to carry out double-jaw splinting as one of the methods of permanent immobilization.
23. Examine a patient with a dislocation of the lower jaw and be able to exercise it.
24. Provide assistance to the patient in case of fainting, collapse, shock.
25. Help the patient with Quincke's edema, anaphylactic shock.
26. Be able to perform artificial respiration and indirect heart massage.

#### **A list of test questions for the preparation of the semester differential assessment**

1. Organization of surgical dental care for the population of Ukraine in outpatient and inpatient conditions.
2. Stages of development of surgical stomatology in Ukraine. Contribution of domestic scientists.
3. Asepsis and antisepsis during operations on the maxillofacial area in polyclinic and hospital conditions.
4. Aseptic and antiseptic aspects of the prevention of SEPDU and viral hepatitis in polyclinic and inpatient practice of a dental surgeon.
5. Ways of preparing the hands of a dental surgeon for surgery in outpatient and inpatient settings.
6. Immunobiological features of tissues of the maxillofacial area. The role of local immunity in the course of odontogenic infection.
7. Examination of the patient in the surgical department of the dental polyclinic and hospital. Medical documentation.
8. Pain, its components, leading ways. Role for the body. The body's reaction to pain, surgical trauma.
9. Medicinal substances for local anesthesia, their chemical composition, mechanism of action. Regulations.
10. Methods of manufacturing, storage and quality assessment of solutions for local anesthesia. Allergy tests.
11. Prolonging the action of local anesthetics . Vasoconstrictors . Dosage. Regulations. Adrenaline intoxication.
12. Types of local anesthesia in the maxillofacial region. Ways of conducting.
13. Potentiated local anesthesia: principles of premedication, main ingredients of medicinal substances included in

premedication regimens, disadvantages and advantages.

14. Medicinal preparation (premedication) of the patient for surgery in the maxillofacial region in polyclinic and hospital conditions. Possible complications of potentiated analgesia.
15. General complications of local anesthesia. Anaphylactic shock. Resuscitation measures.
16. Local complications during local anesthesia in the maxillofacial region. Prevention, diagnosis, treatment.
17. Types and features of general anesthesia during operations on the maxillofacial area in a polyclinic and hospital. Indications and contraindications.
18. Pharmacological drugs for anesthesia, their mechanism of action. Neuroleptanalgesia. Indications and contraindications in surgical stomatology.
19. General and local complications during anesthesia. Prevention. Resuscitation measures.
20. Indications and contraindications for the use of various types of local and general anesthesia during operations on the maxillofacial area in outpatient and inpatient settings.
21. Central anesthesia with exclusion of the II branch of the trigeminal nerve. Zones of innervation, indications, performance technique. Prevention of complications.
22. Central anesthesia with exclusion of the III branch of the trigeminal nerve. Indications of innervation zones, performance technique. Prevention of complications.
23. Anesthesia according to Bershe-Dubov-Uvarov. Indications and method of implementation.
24. Anesthesia according to Vishnevsky in the subtemporal fossa. Trigger-sympathetic blockade. Indication. Conducting method.
25. Thoracic anesthesia according to Weisbrem. Areas of action. Indication. Implementation method. Prevention of complications.
26. Extraoral method of mandibular anesthesia. Areas of action. Indication. Implementation method. Prevention of complications.
27. Apodactyl method of intraoral mandibular anesthesia. Areas of action. Indication. Implementation method. Prevention of complications.
28. Finger method of intraoral mandibular anesthesia. Areas of action. Indication. Implementation method. Prevention of complications.
29. Analgesia of the buccal nerve. Kinds Areas of action. Implementation method. Indication.
30. Mental anesthesia. Areas of action, indications, methods.
31. Infraorbital anesthesia. Areas of action. Indication. Implementation methods. Possible complications, their prevention and treatment.
32. Tuberal anesthesia. Areas of action. Indication. Implementation method. Possible complications, their prevention and treatment.
33. Anesthesia around the incisal opening. Areas of action. Indication. Implementation method. Possible complications, prevention and treatment.
34. Plexual anesthesia. Areas of action. Indication. Implementation method. Prevention of complications.
35. Analgesia techniques for removal of lower molars.
36. Analgesia during sequestrectomy in the mental department of the lower jaw.
37. Analgesia during removal of upper incisors. Write a prescription for a local anesthetic.
38. Analgesia during removal of upper premolars.
39. Analgesia during dissection of superficial phlegmon of SCD.
40. Analgesia during dissection of deep phlegmon of SCD and neck.
41. General complications during and after anesthesia. Prevention, help.
42. Preparation of a dental patient for urgent surgical intervention in polyclinic and hospital conditions.
43. Preparation of a dental patient for planned surgical intervention in polyclinic and hospital conditions.
44. Local complications during and after anesthetic injection. Prevention, treatment.
45. Tactics of the doctor in the case of mistakenly injecting a non-injectable solution instead of an anesthetic.
46. Grinding, collapse, shock. Clinical course, assistance to a dental patient in an outpatient clinic.
47. Local complications during anesthesia in SCD: etiology, pathogenesis, clinical picture, assistance, prevention.
48. Peculiarities of analgesia during tooth extraction in patients with myocardial infarction, diabetes, cardiovascular diseases.
49. Analgesia during removal of salivary stone.
50. Analgesia during sinus surgery.
51. The choice of the method of analgesia in patients with an allergic status.
52. Peculiarities of analgesia in the elderly.
53. Modern means of local anesthesia, equipment: characteristics, disadvantages and advantages.
54. Modern methods of analgesia during dental operations, principles of further development of analgesia methods.
55. Preparation of the patient and oral cavity for the tooth extraction operation.

56. Tooth extraction operation. Stages. Peculiarities of removing individual groups of teeth and roots on the upper and lower jaws.
57. Complications when removing teeth on the lower and upper jaws. Diagnosis, treatment.
58. Toolkit for typical and atypical tooth extraction, its purpose, action.
59. Tools for removing teeth and roots on the upper jaw. Structure and rules of use.
60. Tools for removing teeth and roots on the lower jaw. Structure and rules of use.
61. Atypical tooth extraction. Method. Postoperative wound care.
62. Types and duration of post-extraction wound healing.
63. Atypical removal of retained and dystopian teeth. Indication. Methodology of the operation. Alveolectomy. Complications and their treatment.
64. Bleeding after tooth extraction: its causes, methods of stopping, prevention.
65. Alveolitis: etiology, treatment. Wound care in the postoperative period.
66. Foveal pain: etiology, clinic, treatment.
67. Tactics of the doctor in the case of perforation of the bottom of the maxillary sinus during tooth extraction.
68. Doctor's tactics when pushing a tooth into the maxillary sinus.
69. The specifics of preparing a patient with a blood disease for tooth extraction.
70. The doctor's tactics when pushing a tooth into the tissues of the floor of the oral cavity.
71. Tooth fracture: removal technique, necessary tools.
72. Removal of a tooth from the site of a cancerous tumor: in a patient with hypertension, stroke, myocardial infarction.
73. Removal of a tooth from a cancerous tumor: in a patient with leukemia.
74. Chronic odontogenic inflammatory foci in patients with somatic local and systemic pathology. Tactics of the dentist.
75. Chronic odontogenic inflammatory foci in patients before and after operations on the abdominal cavity and chest. Tactics of the dentist.
76. Causes of jaw fracture during tooth extraction. Tactics of the doctor.
77. Prevention of tooth aspiration, fracture and dislocation of the lower jaw during tooth extraction.
78. Teething diseases. Dystonia and retention. Clinic, diagnosis. Indications and methods of tooth extraction.
79. Pericoronitis. Causes, classification, clinic, diagnosis, methods of conservative and surgical treatment.
80. Etiology, pathogenesis and classification of inflammatory processes in the maxillofacial area.
81. Acute periodontitis. Classification, clinic, diagnosis and treatment.
82. Chronic periodontitis. Classification. Clinic, diagnosis.
83. Chronic granulomatous periodontitis, clinic and diagnosis. Types of granulomas, theories of the origin of epithelium in granulomas.
84. Surgical methods of treatment of chronic periodontitis. Resection of the apex of the root. Indications, method of execution, possible complications, their prevention.
85. Surgical methods of treatment of chronic periodontitis. Hemisection, amputation, replantation. Indication. Implementation method. Possible complications and their prevention.
86. Tooth replantation: immediate and delayed, indications and contraindications, operation technique, complications. Types of fusion of the root of the tooth with the pit.
87. Causes of exacerbations of chronic periodontitis, pathogenesis. Treatment, prevention of complications.
88. Periostitis of the jaws: classification, etiology, pathogenesis, clinic, differential diagnosis.
89. Treatment of acute purulent odontogenic periostitis of the jaws.
90. Osteomyelitis of the jaws. Etiology, theories of pathogenesis, classification.
91. Odontogenic osteomyelitis of the jaws. Acute stage. Clinic, diagnosis, treatment.
92. Odontogenic osteomyelitis of the jaws. Chronic stage. Clinic, diagnosis. Conservative treatment. Sequestrectomy operation. Indications, deadlines, methods. Prevention of complications.
93. Features of the clinical course of odontogenic osteomyelitis of the lower and upper jaws. Dependence on anatomical and topographic features. Complication of osteomyelitis.
94. Differential diagnosis of acute periodontitis, periostitis and osteomyelitis of the jaws.
95. Features of the clinical course, diagnosis and treatment of non-odontogenic acute osteomyelitis of the jaws.
96. Hematogenous acute osteomyelitis of the upper jaw: etiology, clinic, complications and treatment.
97. Actinomycosis of the maxillofacial area: clinic, differential diagnosis, treatment.
98. Syphilis of the maxillofacial area: clinic, differential diagnosis, treatment.
99. Tuberculosis of the maxillofacial area: clinic, differential diagnosis, treatment.
100. Surgical anatomy of the tissue space of the maxillofacial area. Ways of spread of odontogenic infection.
101. Abscess and phlegmon of the maxillofacial area. General clinical signs, methods of diagnosis.
102. Abscess and phlegmon of the maxillofacial area. Principles of complex treatment.

103. Phlegmon of the subtemporal and pterygoid fossa. Etiology, pathogenesis, clinic; diagnosis, treatment.
104. Phlegmon of the temporal area. Causes, clinic, diagnosis, treatment.
105. Abscesses and phlegmons of the undereye and cheek areas. Causes, clinic, diagnosis, treatment.
106. Abscess and phlegmon under the mandibular fibrous space. Its surgical anatomy. Causes, clinic, diagnosis, treatment.
107. Abscess and phlegmon of the pterygopalatine maxillary fibrous space. Surgical anatomy, causes, clinic, diagnosis, treatment.
108. Abscess and phlegmon of the submasseteric fibrous space. Surgical anatomy. Causes, clinic, diagnosis, treatment.
109. Abscess and phlegmon of the parotid and masticatory areas. Causes, surgical anatomy, clinic, diagnosis, treatment.
110. Abscess and phlegmon of the buccal area. Surgical anatomy, reasons. Clinic, diagnosis, treatment.
111. Abscess and phlegmon of the extramaxillary area. Surgical anatomy, causes, clinic, diagnosis, treatment.
112. Abscess and phlegmon of the tongue. Causes, clinic, diagnosis, treatment.
113. Phlegmon of the floor of the mouth. Surgical anatomy, causes, clinic, diagnosis, treatment.
114. Abscess of the maxillolingual groove. Surgical anatomy, causes, clinic, diagnosis, treatment.
115. Purulent-necrotic phlegmon of Zhansul-Ludwig. Surgical anatomy, causes, clinic, diagnosis, treatment.
116. Abscess and phlegmon of peripharyngeal tissue space. Surgical anatomy, causes, clinic, diagnosis, treatment.
117. Odontogenic and non-odontogenic phlegmon of SCD: differential diagnosis, features of the clinical course, treatment of complications.
118. Clinic, topographical anatomy and treatment of phlegmon of the neck.
119. General treatment of phlegmon of SCD. Write out the necessary prescriptions.
120. Odontogenic mediastinitis: etiology, pathogenesis, clinical picture, diagnosis.
121. Differential diagnosis of odontogenic mediastinitis, surgical and drug treatment.
122. Sepsis, infectious-toxic shock. Etiology, clinic, differential diagnosis, treatment.
123. Thrombophlebitis of facial veins, cavernous sinus thrombosis. Etiology, clinic, differential diagnosis, treatment.
124. Odontogenic brain abscess, meningitis. Etiology, clinical picture, treatment.
125. Odontogenic maxillary sinusitis. Etiology, classification, clinic, diagnosis.
126. Odontogenic maxillary sinusitis. Conservative and surgical treatment. Complications and their prevention.
127. Clinic, diagnosis and treatment of arthritis and arthrosis of the temporomandibular joint. Write out the necessary prescriptions.
128. Maxillofacial lymphadenitis: classification, clinic, differential diagnosis, treatment. Furuncle and carbuncle of the maxillofacial area: classification, clinic, complications and treatment.
129. Acute inflammation of the salivary glands: classification, clinical course, treatment.
130. Salivary stone disease: etiology, clinic, complications and treatment.
131. Herzenberg's pseudoparotitis.
132. Chronic inflammation of the salivary glands: classification, clinical course, treatment.
133. Systemic diseases of the salivary glands: Mikulich's disease, Sjogren's syndrome.
134. Noma. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
135. Rash on the face. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
136. Subjects of military stomatology, maxillofacial surgery.
137. Organization of assistance to wounded servicemen of the Armed Forces of Ukraine in peacetime and wartime.
138. Traumatic disease: pathogenesis, classification, prognosis, course, features of treatment, consequences of the disease.
139. Classification of tissue damage in SCD (D.A. Entina-B.D. Kabakova).
140. General characteristics, course, diagnosis of injuries to the face and jaws in peacetime and wartime.
141. Immediate complications of maxillofacial injuries, their diagnosis. Assistance on the battlefield and at the stages of medical evacuation.
142. Scope and content of medical care for the injured in the maxillofacial area in peacetime and wartime.
143. Fiery and non-fiery injuries of soft tissues of the face: classification, course, features of surgical treatment.
144. Types of seams and suture materials. Cosmetic sutures: purpose and modifications.
145. Fiery and non-fiery injuries of the lower jaw: classification, diagnosis, course, assistance at the stages of medical evacuation.
146. X-ray layouts for the diagnosis of damage to the bones of the facial skull.
147. Non-flammable injuries of the upper jaw according to Le-Fort, features of clinical manifestations, diagnosis, course, assistance at the stages of medical evacuation.

148. Fire injuries of the upper jaw, features of clinical manifestations, diagnosis, course, assistance at the stages of medical evacuation.
  149. Temporary (transport) immobilization in case of damage to the bones of SCD, types, principles, requirements.
  150. Specialized assistance for damage to the lower jaw.
  151. Specialized assistance for damage to the upper jaw.
  152. Tigerstedt toothed tires and their modifications.
  153. Laboratory splints and their use in jaw injuries.
  154. Osteosynthesis of the lower jaw: indications, types, methods, equipment, biological and biomechanical principles.
  155. Osteosynthesis of the upper jaw: indications, types, methods, equipment, biological and biomechanical principles.
  156. Orthopedic-apparatus method of treatment of jaw injuries, with their defects: types, indications.
  157. Combined injuries of the jaws: features of clinical manifestation and assistance.
  158. Damage to the facial bones: classification, features of the clinical course.
  159. Damage to the bones of the nose: classification, clinic.
  160. Anterior and posterior tamponade of the nose: indications, technique.
  161. Combined radiation damage of the maxillofacial area: classification, features of the course, assistance.
  162. Combined chemical injuries of the maxillofacial area: classification, features of the course, assistance.
  163. Combined injuries of the facial and cerebral skull: classification, features of the course, diagnosis of liquefaction, principles of assistance.
  164. Facial burns: classification, features of the course, assistance at the stages of medical evacuation.
  165. Treatment of the effects of facial burns.
  166. Modern gunshot wound of SHLD: features, treatment.
  167. Asphyxia due to tissue damage in SLD: classification, features of the clinical course.
- Assistance to the sick.
168. Bleeding in case of damage to the tissues of SCD: classification, providing assistance to patients.
  169. Inflammatory complications of SCD damage: traumatic (inflammatory and non-inflammatory) osteomyelitis, sinusitis. Course, features of treatment.
  170. Damage to the tongue, floor of the mouth: features of the clinical course and assistance.
  171. Damage to the parotid-chewing area, parotid salivary gland: features of the clinical course and assistance.
  172. Neck injury: features of the clinical course and care.
  173. Foreign bodies of the maxillofacial area: etiology, course, methods of removal.
  174. Feeding the injured in the maxillofacial region. Types of diets. Feeding methods. Care of the wounded.
  175. Physical therapy and physiotherapy in the treatment of the injured in the maxillofacial region.
  176. Military medical examination of the wounded in the ShLD.
  177. Benign soft tissue tumors of the maxillofacial area.
  178. Atheroma: clinic, differential diagnosis, treatment.
  179. Lipoma of the maxillofacial area: clinic, differential diagnosis, treatment.
  180. Maxillofacial hemangioma: classification, clinic, treatment (Kondrashin's classification).
  181. Cavernous hemangioma of the maxillofacial area: differential diagnosis, treatment.
  182. Retention cyst of the maxillofacial area: clinic, diagnosis, treatment.
  183. Dermoid cyst: clinical course, differential diagnosis, treatment.
  184. The clinic and treatment are radicular! cysts of the lower jaw.
  185. Follicular cyst of the jaws: clinic, differential diagnosis, treatment.
  186. Residual cyst of the jaws: etiology, pathogenesis, differential diagnosis, treatment.
  187. Paradental cyst of the jaws: etiology, pathogenesis, differential diagnosis, treatment.
  188. Clinic, differential diagnosis and treatment of adamantinoma of the jaws.
  189. Odontoma of the jaws: classification, differential diagnosis, treatment.
  190. Odontogenic tumor-like formations: osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma.
  191. Peripheral form of osteoblastoclastoma: features of the clinical course, diagnosis, treatment.
  192. The central form of osteoblastoclastoma: clinic, radiological picture.
  193. Salivary gland tumors: classification, clinic, diagnosis, treatment.
  193. Biological features of a tumor cell and the effect of radiation, cryotherapy, and hyperthermia on it.
  194. Biological features of a tumor cell and the effect of chemotherapy, oxygenation, ultrasound, hypoxia on it.
  195. Immunological aspects of clinical oncology. Immunotherapy of patients with malignant tumors.
  196. Complex treatment of patients with malignant tumors.

197. Precancerous diseases and facial cancer: etiology, clinic, differential diagnosis, treatment.
198. Facial skin cancer: features of the clinical course, treatment.
199. Lip cancer: clinic, differential diagnosis, treatment.
200. Cancer of the mucous membrane of the oral cavity: clinic, differential diagnosis, treatment.
201. Tongue cancer: etiology, pathogenesis, differential diagnosis, treatment.
202. Salivary gland cancer: clinical course, differential diagnosis, treatment.
203. Cancer of the lower jaw: etiology, clinic, treatment.
204. Cancer of the upper jaw that develops from the upper wall of the maxillary sinus: clinic, differential diagnosis, treatment.
205. Cancer of the upper jaw that develops from the lower wall of the maxillary sinus: clinic, differential diagnosis, treatment.
206. Cancer of the upper jaw that develops from the lateral wall of the maxillary sinus: clinic, differential diagnosis, treatment.
207. Cancer of the upper jaw that develops from the medial wall of the maxillary sinus: clinic, differential diagnosis, treatment.
208. Sarcoma of the jaws and soft tissues of the maxillofacial area.
209. Krail's operation: essence, indications.
210. Vanakh's operation: essence, indications.

### 13. Recommended Books

#### Main (Basic):

1. Malanchuk V.O. Surgical stomatology and maxillofacial surgery: textbook; In 2 volumes - Volume 1/ Malanchuk V.O., Volovar O.S., Harlyauskaite I.Yu. - K.: Logos, 2011 - 627 p.
2. Malanchuk V.O. Surgical stomatology and maxillofacial surgery: textbook; In 2 volumes - Volume 2/ Malanchuk V.O., Logvinenko I.P., Malanchuk T.O. etc. - K.: LOGOS, 2011-606 p.
3. Timofeev O.O. Maxillofacial surgery: Textbook for med. universities, institutes, acad. — 2nd edition, ed. Approved by MES / O.O. Timofeev — K., 2017. — 752 p.
4. Algorithms for performing practical skills in surgical dentistry: teaching method, manual. for dental students. f-tiv VIZ of the Ministry of Health of Ukraine / Ya. P. Nagirny [and others]. - Ternopil: TDMU: Ukrmedknyga, 2017. - 102 p.: illustrations.
5. Lomnytskyi I.Ya. Algorithms of practical skills in surgical dentistry: training. manual / edited by Lomnytskyi I.Ya. - Lviv: GalDent, 2011 - 59 p.
6. Lomnytskyi, I. Ya. Propedeutics of surgical dentistry: teaching. manual for students higher honey. education closing III - IV levels of accreditation / I. Ya. Lomnytskyi. - Lviv: GalDent, 2001. - 114 p.
7. Kharkiv L.V. Surgical stomatology and maxillofacial surgery of childhood: textbook / L.V. Kharkiv, L.M. Yakovenko, I.L. Chekhov; under the editorship L.V. Kharkov. — K.: VSV "Medicine", 2015. — 496 p.
8. Bernadskyi Yu.I. Basics of maxillofacial surgery and surgical stomatology. K. Spalah, 2003, - 512 p.
9. Emergency care in practical surgical dentistry (methodical instructions) / comp. I AM. Vares et al. - Lviv, 2014 - 34 p.
2. Timofeev A. A. Guide to jaw-facial surgery and surgical stomatology. - K.: Chervona Ruta-Tours, 2004. - 1061 p.
3. Vernadsky Yu.I. Fundamentals of maxillofacial surgery and surgical stomatology: Textbook, manual, 3rd ed., reworked. and additional - Vitebsk: Belmedknyga, 1998.-416 p.
4. Guide to surgical stomatology. Under ed. Evdokymova A.I. - M.: Medicine, 1972. - 584p.
5. Guide to surgical stomatology and maxillofacial surgery: In 2 volumes. T. 1 / Ed. V.M. Bezrukova, T.G. Robustova. - Ed. 2nd, revised. and additional - M.: Medicine, 2000. - 776 p.
6. Guide to surgical stomatology and maxillofacial surgery: In 2 volumes. T. 2 / Ed. V.M. Bezrukova, T.G. Robustova. - Ed. 2nd, revised. and additional - M.: Medicine, 2000. -488 p.
7. Dentistry: Textbook / Edited by T.G. Robustova. - M.: Medicine, 2008. -816 p.
8. Surgical stomatology: Textbook / Ed. T.G. Robustova. - M.: Medicine, 1999. - 576 p.
9. Surgical stomatology in diagrams and tables: Study, manual for students and medical interns / H.P. Ruzyn, A.A. Dmytryeva - Kharkov: KhSMU, 2001. - 108 p.
10. Avetikov D. S. Preneoplastic diseases of the maxillofacial region: academician. manual for stud. stomatol. of higher education honey. education closing IV level of accreditation and intern doctors / Avetikov D.S., Sokolova N.A., Ruzin H.P.; Higher state education closing of Ukraine "Ukr. Med. Stomatol. Acad.", Caf. surgeon, stomatology and maxillofacial surgery. plate surgery and reconstruction. of head and neck surgery, Hark. national honey. University, Kaf. surgeon, stomatology and maxillofacial surgery. surgery - Poltava: ASMI, 2012. - 66p.
11. Avetikov D.S. Methodology of the algorithm for performing practical skills in the clinic of surgical dentistry

and maxillofacial surgery: a study guide for students of dental faculties of higher medical institutions of the IV level of accreditation / Avetikov D.S., Yatsenko I.V., Stavytskyi S.O. VDNZU "UMSA" . - Poltava: 2012. - 68 p.

12. Algorithms for performing practical skills in surgical dentistry: teaching method, manual. for dental students. Faculty of Higher Education of the Ministry of Health of Ukraine / Ya. P. Nagirny [and others]. - Ternopil: TDMU: Ukrmedknyga, 2017. - 102 p.: illustrations.

13. Algorithms for performing dental and medical manipulations for preparation for the State certification of students of the 5th year in the specialty "Dentistry": teaching. a guide for students of stomatological faculties, interns, dentists / N. V. Videnko [and others]; Ministry of Health of Ukraine, NSU named after O. O. Bogomolets, Faculty of Dentistry. - K.: Book-plus, 2017. - 408 p.

14. The algorithm for performing dental manipulations from the discipline "Children's surgical dentistry" for the comprehensive practical-oriented state exam in dentistry, edited by Prof. L.M. Yakovenko - K.: Book plus.-2017.- 40 p.

15. Timofeev A.A. Guide to jaw-face surgery and surgical stomatology / A.A. Timofeev. - 5th ed., revised. and additional - Kyiv: Chervona Ruta-Tours, 2012. - 1048 p.

16. Timofeev A.A. Maxillofacial surgery: Textbook for med. IV level university Accr. — 2nd ed., revised. and additional Approved by the Ministry of Education and Culture / Timofeev A.A. — K., 2015. — 800 p.

17. Timofeev O.O. Maxillofacial surgery: Textbook for med. universities, institutes, acad. — 2nd edition, ed. Approved by MES / O.O. Timofeev — K., 2017. — 752 p.

18. Kharkiv L.V. Surgical stomatology and maxillofacial surgery of childhood: under the towel / L.V. Kharkiv, L.M. Yakovenko, I.L. Chekhov; under the editorship L.V. Kharkov. — K.: VSV "Medicine", 2015. — 496 p.

### ***Additional:***

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1. Basics of stomatology: Textbook for med. University level III — IV . accreditation Recommended by the Ministry of Health / Ed. V.O. Malanchuk — K., 2009. — 600 p.

2. O. V. Rybalov Basics of dentistry: Textbook for students of medical faculties of higher medical institutions of education of III - IV levels of accreditation / O. V. Rybalov, M. G. Skikevich. - Vinnytsia: Nova Kniga, 2006. - 232 p.

3. Bernadskyi Yu.I. Basics of maxillofacial surgery and surgical stomatology: teaching. guide. - 3rd ed., revision. and additional - Kyiv: Spalach, 2003

4. Bernadskyi Yu.I. Traumatology and reconstructive surgery of the cranio-maxillofacial region: study guide. - 3rd ed., revised. and additional - Moscow: Med. literature, 2003

5. Lomnytskyi I.Ya. Algorithms of practical skills in surgical dentistry: training. manual / edited by Lomnytskyi I.Ya. - Lviv: GalDent, 2011

6. Lomnytskyi I.Ya. Basics of surgical stomatology. - 2nd ed., revised. and additional - Lviv: GalDent, 2008

7. Lomnytskyi, I. Ya. Propedeutics of surgical dentistry: teaching. manual for students higher honey. education closing III - IV levels of accreditation / I. Ya. Lomnytskyi. - Lviv: GalDent, 2001. - 114 p.

8. Masny 3. Injuries of the maxillofacial area in children: the text of the lecture for students. - Lviv, 2008.

9. Mygovych M. Local anesthesia of maxillofacial tissue: manual. / M. Mygovich, I. Mygovich. - Lviv, 2004

10. Mytchenok V. I. Propedeutics of surgical dentistry: tutorial. for students stomatal Faculty of Medical Sciences of Ukraine III - IV levels of accreditation. - Vinnytsia: Nova Kniga, 2004. - 271 p.

11. Hrytsai N. M. Neurostomatology: teaching. manual for students higher honey. closing education of III - IV levels of accreditation / N. M. Hrytsai, N. O. Kobzista. - Kyiv: Health, 2001. - 142 p.

12. Fundamentals of pre-prosthetic surgical preparation of the oral cavity: Method, development/ I.M. Goth. [etc.] - Lviv: GalDent, 2008.

13. Manual of algorithms in surgical stomatology for preparation for the unified state practical-oriented exam / comp. I. M. Got [and others]. - Lviv, 2006

14. Ruzin H. P. Surgical stomatology in diagrams and tables: teaching. manual for students stomatal ft. of higher med. education closing IV level of accreditation / H. P. Ruzin, A. A. Dmitrieva, O. Yu. Stoyan; under the editorship H. P. Ruzina. - Vinnytsia: New book, 2007

15. Ruzin H. P. Basics of technology of operations in surgical stomatology and maxillofacial surgery: teaching. manual for students stomatol. f-tiv higher med. education closing IV level of accreditation / H. P. Ruzin, M. P. Burykh. - Vinnytsia: New book, 2008.

16. Sokolov V. M. Maxillofacial surgery. Reconstructive surgery of the head and neck: tutorial. for students stomatal of higher education honey. education closing IV level of accreditation / V. M. Sokolov, V. I. Mytchenok, D. S. Avetikov. - Vinnytsia: New book, 2006.

17. Dentistry: in 2 books. : underhand for interns stomatologist. PhDs of postgraduate education. honey. education closing III - IV levels of accreditation / edited by M. M. Rozhka. - Kyiv: Medicine. - 2013 Kn. 2 / [author coll.: M. M. Rozhko, I. I. \_ Kyrylenko, O. G. Denysenko and others. ; rec.: V. S. Onyshchenko, N.

I. Smolyar]. - 992 p.

18. Timofeev A.A. Fundamentals of jaw-face surgery: Study guide / A. A. Timofeev. - M. \_ : LLC "Medical Information Agency", 2007. - 696 p.
19. Timofeev A.A. Maxillofacial surgery [Text] : учеб. / A. A. Timofeev. - Kyiv: Medicine, 2010
20. Timofeev O.O. Maxillofacial surgery: assistant professor. / O. O. Timofeev. - Kyiv: Medicine, 2011
21. Timofeev A. A. Guide to jaw-face surgery and surgical stomatology: study guide, study guide. stomatal f-tov med. int. and med. Univ., medical interns and medical trainees. academic, post-diploma education / A. A. Timofeev. - Kyiv: Chervona Ruta-Tours, 2002. - 1022 p.
22. Timofeev A.A. Guide to jaw-face surgery and surgical stomatology / A.A. Timofeev. - 4th ed., revised. and additional - Kyiv: Chervona Ruta-Tours, 2004. - 1061 p.
23. Tkachenko P.I., Gurzhii O.V., Bilokon S.O. Acute odontogenic processes of the maxillofacial area in children (periostitis, osteomyelitis, lymphadenitis). - Lviv: Kompakt-LV, 2006.
24. Kharkiv L. V. Surgical stomatology of children's age: tutor. for students higher honey. education closing III - IV levels of accreditation / L. V. Kharkiv, L. M. Yakovenko, I. L. Chekhova; under the editorship L. V. Kharkov. - Kyiv: Book Plus, 2003
25. Kharkiv L. V. Surgical stomatology and maxillofacial surgery of children's age: National. handyman for students higher med. education closing III - IV levels of accreditation / L. V. Kharkiv, L. M. Yakovenko, I. L. Chekhova; under the editorship L. V. Kharkov. - Kyiv: Medicine, 2015. - 496 p.
26. Kharkiv L.V. Surgical stomatology and maxillofacial surgery of childhood: textbook / L.V. Kharkov, L.N. Yakovenko, I.L. Chekhova. - Moscow: Book plus, 2005
27. Cherkashin S.I. Basics of stomatology and maxillofacial surgery. - Ternopil: Ukrmedknyga, 2003.
28. Cherkashin S.I. Diseases of the maxillofacial area: a textbook. - Ternopil: Ukrmedknyga, 2001.
29. Bauml , PhilipsR . W. , LundM . R. \_ TexbookofOperativeDentistry = Textbook of operative dentistry,- 3-rded. - Philadelphia: Saunders, 1995,- 661p.
30. Kharkov LV Pediatric oral and maxillofacial surgery : a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / LV Kharkov, LM Yakovenko, N.V. Kiselyova; ed. by LV Kharkov. - Kyiv: AUS Medicine Publishing, 2015. - 103 p.
31. Oral and maxillofacial surgery = Surgical dentistry and maxillofacial surgery. Part 1 : textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / VO Malanchuk [et al.] ; ed. V. Malanchuk. - Vinnytsia: New book, 2011
32. Oral and maxillofacial surgery = Surgical dentistry and maxillofacial surgery. Part 2 : textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / VO Malanchuk [et al.] ; ed. V. Malanchuk. - Vinnytsia: New book, 2011.
33. 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) [Text] : methodological guide / Ch. R. Pohranychna, RZ Ogonovsky. - Lviv, 2011.
34. 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) [Text] : methodological guide / Ch. R. Pohranychna, RZ Ogonovsky. - Lviv, 2011.
35. Vares Ya.E., Ogonovsky RZ, Pohranychna Ch.R. Principles of Local Dental Anesthesia and Teeth Removal: An Illustrated Methodological Guide. - Lviv, 2007.
36. Timofieev OO Anesthesia in Oral and Maxillofacial Surgery / OO Timofieev, LI. Fesenko. - Kyiv: OMF Publishing, 2016, 128 p.
- 37.