



“Confirmed”

First Vice-Rector

of scientific and pedagogical work

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2023

CURRICULUM OF THE EDUCATIONAL DISCIPLINE

(type of the discipline – elective)

EC 2.8. Manufacturing medical practice of Surgical Dentistry

according to an individual profile course of practical training (IPCPT)
“Surgical Dentistry”

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

Sphere of Knowledge 22 «Healthcare»

Specialty 221 «Dentistry»

faculty, year: Dentistry, V

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

Protocol № 11

Dated from «13» 06 / 2023

Head of Chair,
prof. Yan Vares

Yan Vares

Approved
by the Profile Methodical Commission
on stomatological disciplines

Protocol № 2

Dated from «16» 06 / 2023

Head of the Profile
Methodical Commission
prof. Yan Vares

Yan Vares

My

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

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

In dental disciplines

“ _____ ” _____ 2022, protocol No ___

INTRODUCTION

CURRICULUM of the academic discipline manufacturing medical practice from surgical dentistry, individual profile course "surgical dentistry"

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

Sphere of Knowledge 22 «Healthcare»

Specialty 221 «Dentistry»

educational program of Master of Dentistry

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

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

The study of the discipline «manufacturing medical practice from surgical dentistry» helps to form a holistic view of the structure and functioning of the organs of the maxillo-facial area; deepening of theoretical and practical preparation, acquisition of professional practical skills for independent medical activity.

Structure of the discipline	Number of credits, hours			Year of study/ semester	Test type
	Total	Quantity of hours	Quantity of lessons		
Name of the discipline: manufacturing medical practice from surgical dentistry <i>Content module 1</i>	10 credits	300	25	V course (IX semester)	Differential credit

The subject of study of the discipline are pathological processes of maxillo-facial area, related to the competence of surgical dentistry and maxillofacial surgery, features of their clinical course, the main diagnostic and therapeutic manipulations used in the practice of the dental surgeon.

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

1. The purpose and objectives of the discipline

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

1.2. The main tasks The main tasks of studying the discipline "industrial medical practice in surgical dentistry" are the ability to conduct an examination of a surgical dental patient, to diagnose the main symptoms and syndromes of MFA 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, detect and identify the manifestations of somatic diseases in the oral cavity; according to indications, perform surgical treatment of dental diseases using adequate methods of analgesia and rational postoperative medical support.

As a result of studying the discipline, the student must

know:

- Features of the examination of patients with MFA pathology, participation of related specialists in the examination.
- Methods of examination of patients with trauma to the maxillofacial area. Organizational principles of assistance to the victims with injuries of the maxillofacial area.
- Principles of deontology and medical ethics in surgical dentistry and maxillo-facial surgery.
- Principles of organization of dental care in Ukraine.

- Basic methods of general and local anesthesia, sedation in the practice of the dental surgeon (demonstrations, contraindications, features of conducting).
- General and local complications in the practice of surgical dentistry and maxillo-facial surgery (MFS). Cardiopulmonary resuscitation.
- Tooth extraction operation. Modern methods of tooth extraction.
- Diseases of teeth eruption (diagnosis, treatment).
- Inflammatory processes of hard tissues of the MFA. Periodontitis, periostitis, alveolitis, osteomyelitis (diagnosis, treatment).
- Inflammatory processes of the soft tissues of the MFA. Abscesses, phlegmons, lymphadenitis, boils, carbuncles, erysipelas (diagnosis, treatment).
- Odontogenic sinusitis. Modern methods of diagnosis and treatment.
- Inflammatory and reactive-dystrophic diseases of the salivary glands. Salivary stone disease (diagnosis and treatment).
- Specific inflammatory diseases of the MFA. Actinomycosis, tuberculosis, syphilis, diphtheria, HIV (diagnosis and treatment).
- Temporomandibular joint dysfunction. Inflammatory and destructive processes of the TMJ. Modern methods of diagnosis and treatment.
- Complications of inflammatory processes of the MFA (sepsis, mediastinitis, brain abscess, cavernous sinus thrombosis, etc.). Diagnosis and treatment.
- Traumatic damage of the teeth. Classification, indications for the preservation of injured teeth. First aid for dental injuries in children and adults.
- Traumatic injuries of soft tissues of MFA. Types of surgical treatment of wounds, principles of care for different types of wounds MFA.
- Traumatic injuries of hard tissues of MFA. Types of fractures of the jaw bones.
- Differential diagnosis, participation of related specialists in the treatment of patients. Types of conservative and surgical treatment.
- Traumatic disease (pathogenesis, clinical symptoms, assistance during the evacuation stages).
- Thermal (burns, frostbite), chemical (acids, alkalis, heavy metal salts), physical (electric shock) facial damage.
- Combined damage of the maxillofacial area. Clinic, diagnosis, treatment. Traumatic disease.
- Organization of dental care in the Armed Forces of Ukraine.
- Principles of medical sorting and stage treatment of the injured in the maxillofacial area.
- General characteristics, clinical course, diagnosis of gunshot wounds, burns, combined lesions of the maxillofacial area.
- Early and late complications of traumatic injuries of the maxillofacial area. Clinic, diagnosis, treatment.

to be able to:

- Collect anamnesis and to examine the patient for the specified pathology of MFA.
- Make a plan and carry out an examination of the patient with trauma to the maxillofacial area.
- Plan additional research methods and be able to interpret their results.
- Analyze and interpret the results of the X-ray examination in the Surgical Dentistry Clinic and establish an appropriate clinical diagnosis based on them.
- Fill in appropriate medical records.
- Perform diagnostic puncture of inflammatory focus of the MFA.
- To collect the inflammatory exudate for the antibiotic susceptibility test (study of the nature of the microflora and its antibiotic susceptibility).
- To collect the material from the wound surface for cytological examination (imprint, swab) and for further smear production on the specimen glass.
- To prescribe an individual scheme of premedication, depending on the psycho-somatic state of the patient, the nature and extent of surgical intervention.
- To demonstrate the techniques of preoperative preparation of the surgeon's hands by modern methods.
- To perform a phantom-based technique for antiseptic preparation of the surgical site.
- To make a plan for comprehensive screening and treatment for AIDS patients.
- To make the plan of complex treatment of patients with the specified pathologies.
- To perform a phantom-based technique of application anesthesia.
- To perform a phantom-based technique of topical anesthesia.
- To perform a phantom-based technique of infiltration anesthesia.
- To perform a phantom-based technique of mandibular anesthesia.
- To perform a phantom-based technique of torus anesthesia.
- To perform a phantom-based technique of mental anesthesia.
- To perform a phantom-based technique of lingual nerve block.
- To perform a phantom-based technique of buccal anesthesia.
- To perform a phantom-based technique of canine anesthesia.

- To perform a phantom-based technique of palatal anesthesia.
- To perform a phantom-based technique of tuberal anesthesia.
- To perform a phantom-based technique of infraorbital anesthesia.
- To perform a phantom-based technique of central anesthesia.
- To remove certain groups of teeth on the upper and lower jaws (phantom).
- To perform atypical tooth extraction as in case of pericoronitis (phantom).
- To open the subperiosteal abscess (phantom).
- To close oro-antral communication (phantom).
- To perform radical sinusotomy (phantom).
- To perform sequestrectomy (phantom).
- To perform cystotomy.
- To perform different stages of the operation - to open an abscess and phlegmon of various anatomical and topographic areas of the MFA (using the phantom).
- To perform drainage the wound.
- Perform primary surgical treatment of the wound.
- Demonstrate the technique of applying of surgical knot.
- Provide a tooth replantation.
- Make temporary immobilization of the fragments of the lower and upper jaws.
- Make temporary tires and provide fixation of the jaw fractures.
- Make ligature fixation of the teeth.
- Make a smooth arch bar.
- Carry out permanent immobilization of fragments of the lower and upper jaws.
- Provide fixation of the bimaxillary arch bars as one of the permanent immobilization methods.
- Reposit the dislocation of the mandible.
- Apply maxillofacial devices (repositioning, shaping, substitutive and fixation).
- To perform cardio-pulmonary resuscitation.

To demonstrate:

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

1.3 Competence and course results.

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

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

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

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

pathology; performing the range of medical and dental manipulations; treatment of major dental diseases; dealing with medical documentation).

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

Marking

NQF -National Qualifications Framework;

GC- general competencies;

GLO- general learning outcomes;

SC - special (professional, subject) competencies;

SLO- special (professional, subject) learning outcomes;

N- normative type of educational activity within the specialty;

S- selective educational activity.

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

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

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

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

Detailing competencies in the NQF descriptor in the form of «Competency matrix».

**Competence matrix of the educational component of manufacturing medical practice from surgical dentistry,
individual profile course of practical training "general dentistry"**

Program competencies	(CC 3.3)
<i>General competencies</i>	
GC 1 Ability to abstract thinking, analysis and synthesis.	+
GC 2 Knowledge and understanding of the subject area and understanding of professional activity.	+
GC 3 Ability to apply knowledge in practice.	+
GC 4 Ability to communicate in the state language both orally and in writing.	+
GC 5 Ability to communicate in English.	+
GC 6 Skills in the use of information and communication technologies.	+
GC 7 Ability to search process and analyze information from various sources.	+
GC 8 Ability to adapt and act in a new situation.	+
GC 9 Ability to identify, pose and solve problems.	+
GC 10 Ability to be critical and self-critical.	+
GC 11 Ability to work in a team.	+
GC 12 The desire to preserve the environment.	+
GC 13 The ability to act socially responsibly and consciously.	+
GC 14 The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.	+
GC 15 Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.	+
<i>Special (professional) competencies</i>	
SC 1 Ability to collect medical information about the patient and analyze clinical data.	+
SC 2 Ability to interpret the results of laboratory and instrumental research.	+
SC 3 Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.	+
SC 4 Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.	+
SC 5 Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	+
SC 6 Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	+
SC 7 Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.	+
SC 8 Ability to perform medical and dental manipulations.	+
SC 9 Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.	+
SC 10 Ability to organize and conduct medical and evacuation measures.	+
SC 11 Ability to determine tactics, methods and provide emergency medical care.	+
SC 12 Ability to organize and conduct screening examinations in dentistry.	+
SC 13 Ability to assess the impact of the environment on the health of the population (individual, family, population).	+
SC 14 Ability to maintain regulatory medical records.	+
SC 15 Processing of state, social and medical information.	+
SC 16 Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and MFA.	+
SC 17 Ability to legally support their own professional activities.	+
SC 18 Ability to provide home care according to the protocols of tactical medicine.	+

Learning outcomes

**Integrative final program learning outcomes, the formation of which is facilitated by the discipline:
Normative and variable content of training, formulated in terms of learning outcomes**

Program learning outcomes

Code of result of the learning outcome	The content of the learning outcome	Reference to the competency matrix code
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Identify and identify the leading clinical symptoms and syndromes (according to list 1 of educational and professional program – EPP); according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of dental disease (according to list 2 of EPP).	<i>PRE1</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Collect information about the general condition of the patient, evaluate the psychomotor and physical development of the patient, the condition of the organs of the maxillofacial area, based on the results of laboratory and instrumental studies to assess information about the diagnosis (according to list 5 of EPP).	<i>PRE 2</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and / or instrumental) according to the list 5 of EPP, patients with diseases of organs and tissues of the oral cavity and maxillofacial area for differential diagnosis of diseases (according to the list 2 of EPP).	<i>PRE 3</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the final clinical diagnosis in accordance with the relevant ethical and legal norms, by making an informed decision and logical analysis of the obtained subjective and objective data of clinical, additional examination, differential diagnosis under the supervision of a supervising doctor in a medical institution (according to list 2.1 of EPP).	<i>PRE 4</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Establish a diagnosis of emergencies under any circumstances (at home, on the street, in a medical institution), in an emergency, martial law, lack of information and limited time (according to list 4 of EPP).	<i>PRE 5</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases.	<i>PRE 6</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Analyze the epidemiological situation and carry out measures of mass and individual, general and local medicament and non-medicament prevention of dental diseases.	<i>PRE 7</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the approach, plan, type and principle of treatment of dental disease (according to list 2 of EPP) by making an informed decision according to existing algorithms and standard schemes.	<i>PRE 8</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the nature of work, rest and the necessary diet in the treatment of dental diseases (according to list 2 of EPP) on the basis of preliminary or final clinical diagnosis by making an informed decision according to existing algorithms and standard schemes.	<i>PRE 9</i>

<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the tactics of treatment of the dental patient with somatic pathology (according to list 3 of EPP) by making the decision according to existing algorithms and standard schemes.	<i>PRE 10</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Carry out treatment of major dental diseases according to existing algorithms and standard schemes under the supervision of a doctor-manager in a medical institution (according to list 2.1 of EPP).	<i>PRE 11</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Organize medical and evacuation measures among the population, servicemen, in emergency situations, including martial law, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.	<i>PRE 12</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Determine the tactics of emergency medical care, using the recommended algorithms, under any circumstances on the basis of a diagnosis of emergency in a limited time (according to list 4 of EPP).	<i>PRE 13</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Analyze and evaluate government, social and medical information using standard approaches and computer information technologies.	<i>PRE 14</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Assess the impact of the environment on the health of the population in a medical institution by standard methods.	<i>PRE 15</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.	<i>PRE 16</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.	<i>PRE 17</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.	<i>PRE 18</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Adhere to the requirements of ethics, bioethics and deontology in professional activities.	<i>PRE 19</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Organize the necessary level of individual safety (personal and carers) in case of typical dangerous situations in the individual field of activity.	<i>PRE 20</i>
<i>Kn1, Kn2, Skl1, c2, Com1, Com2, Aut1, Aut2</i>	Perform medical manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1 of EPP) for different segments of the population and in different conditions (according to list 6 of EPP).	<i>PRE 21</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Perform medical dental manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1 of EPP) for different segments of the population and in different conditions (according to list 7 of EPP).	<i>PRE 22</i>
<i>Kn1, Kn2, Skl1, Skl2, Com1, Com2, Aut1, Aut2</i>	Perform manipulations of emergency medical care, using standard schemes, under any circumstances on the basis of a diagnosis of emergency (according to list 4 of EPP) in a limited time (according to lists 6, 7 of EPP).	<i>PRE 23</i>

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

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

5. Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 1	Skl 1		Aut 1
6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 1, Kn 2	Skl 1	Com 1	
7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.		Skl 1		Aut 1, Aut 2
8. Ability to perform medical and dental manipulations.	Kn 1	Skl 1		Aut 1
9. Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.	Kn 1	Skl 1	Com 1	Aut 1, Aut 2
10. Ability to organize and conduct medical and evacuation measures.	Kn 1, Kn 2	Skl 1	Com 1	Aut 1, Aut 2
11. Ability to determine tactics, methods and provide emergency medical care.	Kn 1, Kn 2	Skl 1		Aut 1, Aut 2
12. Ability to organize and conduct screening examinations in dentistry.	Kn 1	Skl 2	Com 1	Aut 2
13. Ability to assess the impact of the environment on the health of the population (individual, family, population).	Kn 2	Skl 2		
14. Ability to maintain regulatory medical records.			Com 1	Aut 1
15. Processing of state, social and medical information.	Kn 2		Com 1, Com 2	Aut 1, Aut 2
16. Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and MFA.	Kn 1	Skl 1	Com 1	
17. Ability to legally support their own professional activities.	Kn 1		Com 1	Aut 2

18. Ability to provide home care according to the protocols of tactical medicine.	Kn 2	Skl 1	Com 1	Aut 1, Aut 2
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Matrix of compliance with the learning outcomes and competencies defined by the Standard

Program learning outcomes	Competencies																																							
	Integral competency	General competencies															Special (professional) competencies																							
		GC1	GC2	GC3	GC4	GC5	GC6	GC7	GC8	GC9	GC10	GC11	GC12	GC13	GC14	GC15	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17	SC18						
PRE1	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+																		
PRE 2	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+						+	+	+	+			+						
PRE 3	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+						+	+	+	+			+						
PRE 4	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+											+	+						
PRE 5	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+													+	+				
PRE 6	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+						+	+	+	+			+	+					
PRE 7	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+						+	+	+	+			+	+					
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PRE 23	+	+	+	+	+	+	+	+	+	+	+					+	+	+		+	+	+															+	+		+

Learning outcomes for the discipline: professional training of the dentist, which involves mastering the theory and practice of the sections " Propaedeutics of surgical dentistry", "Inflammatory diseases of the maxillo-facial area" and "Traumatology of the maxillo-facial area; ability to carry out examination of a surgical dental patient, to diagnose the main symptoms of MFA main diseases, to justify and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis, identify and identify manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment, identify different clinical options and complications, know the measures of primary and secondary prevention of surgical dental diseases the study of which is provided in the all content modules.

2. Information volume of the discipline.

10 ECTS credits of 300 hours are assigned to the study of the academic discipline.

To explain principles of deontology and medical ethics in surgical dentistry and MFS, methods of examination of patients with MFA pathology, participation of related specialists in the examination;

- the etiology of the inflammatory processes of solid tissues of MFA (periodontitis, perioditis, osteomyelitis), inflammatory processes of soft tissues of MFA (abscesses, phlegmons, lymphadenitis, boils, carbuncles, odontogenic sinusitis, specific inflammatory diseases of MFA (actinomycosis, tuberculosis, syphilis, diphtheria, HIV), inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stones, complications of inflammatory processes of MFA (sepsis, mediastinitis, brain abscess, thrombosis of cavernous sinus, etc.);

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

- the features of gunshot, thermal, chemical injuries of the MFA, taking into account the aesthetic and functional significance of the face and the topographic proximity of vital organs, the principles of emergency care for patients with extreme traumas, the sequencing of diagnostic and treatment measures in such cases;

- the concept of "oncological vigilance" and the principles of organization of antitumor service, medical examination of cancer patients, the role of factors of endogenous and exogenous origin in the occurrence of tumors, to understand the patterns of growth and development of tumors and tumor-like formations, the principles of their differential diagnosis;

- etiology, classification, clinical picture, differential diagnosis of defects and deformations of MFA, principles of reconstructive operations in MFA, methods of examination of patients with pathology of MFA, participation of related specialists in the examination.

To interpret the pathogenesis of inflammatory processes of hard tissues of MFA (periodontitis, periostitis, osteomyelitis), inflammatory processes of soft tissues of MFA (abscesses, phlegmons, lymphadenitis, boils, carbuncles, behemic inflammation), odontogenic sinusitis, specific inflammatory diseases of MFA (actinomycosis, tuberculosis, syphilis, diphtheria, HIV), inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stones, complications of inflammatory processes of MFA (sepsis, mediastinitis, brain abscess, thrombosis of cavernous sinus, etc.);

- pathogenesis of tumor-like formations of soft tissues and bones of MFA (jaw cysts, soft tissue cysts), benign odontogenic and neodontogenic tumors of the jaws, (ameloblastoma, odontoma, cementoma, epulid, osteoblastoma, osteoclastoma, osteoma, osteoma, osteoma, osteoma) hemangioma, fibroma), osteogenic tumor-like formations of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma), benign tumors of the soft tissues of the MFA, precancerous diseases of the skin, mucous membranes and bones of MFA, benign and malignant tumors of salivary glands and salivary gland cysts;

- pathogenesis of congenital and acquired defects and deformities of MFA.

To analyze indications and contraindications, features of application of the basic techniques of the general and local anesthesia, sedation in practice of the surgeon-dentist;

- the indications and contraindications to the application of modern methods of diagnosis and treatment of inflammatory processes of solid and soft tissues of MFA, specific inflammatory diseases of MFA, inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stones, complications of inflammatory diseases of MFA, management of oro-antral connections.

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

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

- clinical signs of benign and malignant tumors, stages of damage according to the TNM system, to understand their tissue affiliation, the principles of classification of tumors and tumor-like formations; indications and contraindications to the use of modern methods of diagnosis and treatment of tumors of soft tissues and bones of the thyroid gland, benign odontogenic and neodontogenic tumors of the jaws, osteogenic tumors of the jaws, benign tumors of soft tissues of the thyroid gland, precancerous diseases of the skin and mucosa, mucosa tongue, malignant tumors of the soft tissues and bones of the thyroid gland and neck, benign and malignant tumors and cysts of the salivary glands;
- indications and contraindications, features of application of the basic techniques of restorative-plastic interventions of MFA, features of the general, local anesthesia and sedation in practice of the surgeon-dentist.

To develop a comprehensive plan and to conduct an examination of a patient with MFA pathology, to make a plan of additional research methods and to be able to interpret their results, a plan of complex examination and treatment of AIDS patients;- a comprehensive plan for the examination and treatment of patients with inflammatory diseases of the MFA, to be able to interpret their results;

- a patient's examination with MFA injuries of peacetime, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for patients with combined injuries;
- a patient's examination with with MFA injuries after extreme situation or war conflict, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for patients with combined injuries;
- a plan and conduct an examination of a patient with a benign or malignant neoplasm, prescribe the necessary additional research methods (radiological, radioisotope, cytological, histological) and be able to interpret their results, justify the scope and sequence of treatment, surgery, radiation therapy, chemotherapy, cryotherapy, etc.) aimed at rehabilitating the patient.
- a plan and conduct an examination of a patient with MFA pathology, make a plan of additional research methods and be able to interpret their results, a plan of comprehensive examination and treatment of patients with defects and deformations of MFA.

To perform collection of anamnesis and examination of the patient for the specified pathology of MFA, to fill in the corresponding medical documentation;

- on a phantom diagnostic puncture of the inflammatory center of the MFA, the operation of disclosing the subperiosteal abscess, the operation of closing the airborne combination, the operation of radical sinusotomy, sequestration surgery, the stages of the operation - the disclosure of abscesses and phlegmon of different anatomical and topographic sites of the MFA;
- collection of anamnesis and examination results of the patient MFA injuries of peacetime, fill in the relevant medical documentation;
- collection of anamnesis and examination results of the patient with MFA injuries after extreme situation or war conflict, fill in the relevant medical documentation;
- collection of anamnesis and examination of a patient with benign and malignant formation of MFA, fill in the relevant medical documentation, refer the patient to the appropriate diagnostic and treatment depending on the type and stage of cancer.
- collection of anamnesis and examination of a patient with congenital defects and deformities of the MFA, fill in the relevant medical documentation.
- perform cardiopulmonary resuscitation on the phantom.

To conduct collection of the material for additional research (microbiological, cytological, histological); preventive measures and emergency care;

- diagnostics of complications of inflammatory processes of MFA; registration of the corresponding medical documentation;
- primary surgical debridement of soft tissue lesions of the MFA, temporary (transport) immobilization in fractures of the upper and lower jaw, assist with emergency conditions;
- primary surgical debridement of soft tissue wounds of the MFA, examination of the wound canal in gunshot wounds of the soft tissues and bones of the facial skeleton, temporary (transport) immobilization in cases of fractures of the upper and lower jaw in extreme situations, to provide assistance in emergency situations;
- puncture, incision and excisional biopsy of the tissues of the thyroid gland, to have the method of diathermocoagulation and cryodestruction;
- measures for prevention of MFA pathologies.

To assign an individual scheme of medical treatment depending on the psycho-somatic state of the patient, the nature and extent of the surgical intervention, medication therapy in the postoperative period, provide appropriate recommendations;

- antishock, analgesic and other types of drug therapy at the stages of the evacuation of the victims in the conditions of hostilities, to provide appropriate recommendations;
- comprehensive medical treatment of patients with benign and malignant tumors of the MFA in the pre-, intra- and postoperative periods, to provide appropriate recommendations;
- individual scheme of premedication depending on the psycho-somatic condition of the patient, the nature and volume of surgery, drug therapy in the postoperative period, provide appropriate recommendations, prescribe conservative treatment of diseases and pathologies of the MFA.

To demonstrate the techniques of preoperative preparation of the surgeon's hands by modern techniques, the technique of antiseptic treatment of the surgical site, techniques of local anesthesia on the upper and lower jaws; operations for the removal of individual groups of teeth on the upper and lower jaw, pericoronarectomy, atypical tooth extraction;

- the ability to perform diagnostic puncture of the inflammatory center of the MFA, the operation to open the subperiosteal abscess, the operation of closing the oro-antral connections combination, the operation of radical sinusotomy, sequestration surgery, the stages of the operation - the foramen of abscesses and phlegmons of various anatomical and topographic areas of the MFA.

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

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

- ability to interpret the results of additional methods of examination aimed at verification of tumors of the MFA, methods of soft and hard tissue biopsy, to make a plan of complex (surgical, radiation, chemotherapeutic) treatment of a cancer patient;

- techniques of local plastic surgery.

Topic №1. The structure and organization of surgical dentistry for the population of Ukraine. Acquaintance with the work of a dental surgeon. Identification of risk factors for the development of major dental diseases depending on the anatomical and physiological features of the structure of the maxillofacial area. Methods of examination of the patient. Algorithm of dental examination of a patient with surgical dental pathology. Subjective and objective methods of diagnostics.

Types of surgical dental care: outpatient and inpatient (emergency and planned). Features of the organization of care in extreme situations.

Organization of work and equipment of the surgical department (office) of the dental clinic, maxillofacial department of the hospital, operating room, dressing.

Special equipment, apparatus and instruments for examination patients and dental interventions.

Medical documentation in the surgical department (office) of the dental clinic and in the maxillofacial department of the hospital. Statistic indicators of work of a dental surgeon.

Indications for hospitalization of patients with pathology of the maxillofacial area, features of their examination and rehabilitation.

Topic №2. Methods of examination of the patient. Algorithm of dental examination of a patient with surgical dental pathology. Subjective and objective methods of diagnostics.

Features of examination of patients with diseases of the dental system, injuries, inflammatory processes, benign, malignant and tumor-like formations, congenital and acquired defects, deformities of the maxillofacial area.

The value of personal communication between doctor and patient. Emotional factors associated with diseases, injuries and defects of the face and treatment. Deontology and medical ethics in surgical dentistry and maxillofacial surgery.

Collection of subjective data of the patient. Complaints at the time of application to the medical institution.

Medical history: disease development, its dynamics, previous treatment.

Life history: hereditary, transferred and concomitant diseases, bad habits - drug use, alcohol, smoking; heredity, allergy history.

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

Examination of the maxillofacial area. Face 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 the salivary glands and their ducts, temporomandibular joints, lymphatic system of the face and neck. Establishing the nature and volume of defects and deformations of facial tissues and oral cavity, the condition of surrounding tissues. Assessment of the degree of anatomical, functional and aesthetic disorders.

Objective research methods with the use of modern diagnostic equipment. Radiological: radiography, tomography, panoramic radiography and pantomography. Application of artificial contrast. Computed tomography and magnetic

resonance imaging, radioisotope, ultrasound diagnostics, remote and contact thermography. Morphological methods: cytological examination of prints, scrapes, puncture material; histological examination of biopsy material. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnostics. Use of computers in diagnostics: decoding of radiographs, planning of operations, results of treatment.

The volume of examination of patients with pathology of the maxillofacial area during treatment in the clinic and hospital, participation of related specialists in the examination.

Topic №3. Sanitary-epidemiological requirements of the dental surgeon. Asepsis and antiseptics in surgical dentistry.

Asepsis and antiseptics for operations on the face and mouth. Preparation of the oral cavity for surgery.

Sterilization of instruments, dressings and suture material (silk, catgut, threads of synthetic materials). Preparing the surgeon's hands for surgery.

Features of care for outpatients and inpatients with inflammatory diseases, injuries and after planned surgery in the maxillofacial area, their nutrition.

In-hospital infection in the dental polyclinic and maxillofacial facial hospital, ways of infection transmission. Protection of patients and medical staff from nosocomial infections, viral hepatitis, HIV and others.

Topic №4. Dental instruments recommended to perform surgical procedures in the oral cavity.

Classification of instruments used for work in the oral cavity. Groups of instruments. Characteristics of the materials from which they are made. Safety rules for working with surgical instruments in the oral cavity.

Topic №5. Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: tuberal and palatal anesthesia.

Anaesthesia in surgical interventions on the maxilla. Conduction anaesthesia. Technique of blocking the II branch of the trigeminal nerve at the round foramen, near infraorbital foramen, maxillary tuber, pterygopalatine and incisive foramen. Intra- and extraoral techniques. Indications and contraindications for administration. Mistakes, complications, their prevention and treatment.

The combination of conduction and infiltration anaesthesia in surgical interventions on the maxillo-facial area and tooth extractions. Contraindications for administration of local anaesthesia. subperiosteal anaesthesia, indications, technique, complications. Intraalveolar anaesthesia, indications, technique, advantages and disadvantages and complications. Intrapulpal anaesthesia, indications, technique, complications. Intraosseous anaesthesia, indications, technique, complications.

Topic №6. Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: infraorbital, incisal anesthesia.

Anaesthesia in surgical interventions on the maxilla. Conduction anaesthesia. Technique of blocking the II branch of the trigeminal nerve at the round foramen, near infraorbital foramen, maxillary tuber, pterygopalatine and incisive foramen. Intra- and extraoral techniques. Indications and contraindications for administration. Mistakes, complications, their prevention and treatment.

The combination of conduction and infiltration anaesthesia in surgical interventions on the maxillo-facial area and tooth extractions. Contraindications for administration of local anaesthesia. subperiosteal anaesthesia, indications, technique, complications. Intraalveolar anaesthesia, indications, technique, advantages and disadvantages and complications. Intrapulpal anaesthesia, indications, technique, complications. Intraosseous anaesthesia, indications, technique, complications.

Topic №7. Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: oral, buccal, and lingual anesthesia

Anaesthesia in surgical interventions on the mandible. Regional (nerve block) anaesthesia. Technique of blocking the III branch of the trigeminal nerve at the oval foramen, near mandibular canal (mandibular and torus anaesthesia), near the mental foramen. Intra- and extraoral techniques of anaesthesia. Indications and contraindications for administration. Mistakes, complications, their prevention and treatment.

The combination of conduction and infiltration anaesthesia in surgical interventions on the maxillo-facial area and tooth extractions. Contraindications for administration of local anaesthesia. subperiosteal anaesthesia, indications, technique, complications. Intraalveolar anaesthesia, indications, technique, advantages and disadvantages and complications. Intrapulpal anaesthesia, indications, technique, complications. Intraosseous anaesthesia, indications, technique, complications.

Topic №8. Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: mandibular and torus anesthesia, Berchet anesthesia.

Anaesthesia in surgical interventions on the mandible. Regional (nerve block) anaesthesia. Technique of blocking the III branch of the trigeminal nerve at the oval foramen, near mandibular canal (mandibular and torus anaesthesia), near the mental foramen. Intra- and extraoral techniques of anaesthesia. Indications and contraindications for administration. Mistakes, complications, their prevention and treatment.

The combination of conduction and infiltration anaesthesia in surgical interventions on the maxillo-facial area and tooth extractions. Contraindications for administration of local anaesthesia. subperiosteal anaesthesia, indications, technique, complications. Intraalveolar anaesthesia, indications, technique, advantages and disadvantages and complications. Intrapulpal anaesthesia, indications, technique, complications. Intraosseous anaesthesia, indications, technique, complications.

Topic №9. Local and general complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.

Mistakes and complications of local anesthesia: the introduction of tissue toxins, damage to nerves and blood vessels, muscles, infections, and others. Post-injection erection of the jaws. General complications: reactions from the cardiovascular system and CNS - fainting, collapse; anaphylactic shock, other allergic reactions. Providing emergency care. Premedication, its principles, tasks, action. Indications for use. Features of carrying out in the conditions of polyclinic and hospital. Groups and clinical and pharmacological characteristics of drugs used for premedication (analgesics, tranquilizers, antihistamines, etc.). Types of premedication used by a dentist and anesthesiologist.

Topic №10. Operation of a typical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.

Tooth extraction. Tools for tooth extraction, their structure and principles of operation. Indications and contraindications to tooth extraction surgery. Features of patient preparation and surgery in patients with changes in the cardiovascular system, blood diseases and other systemic disorders, pregnant women and children.

Typical tooth extraction: Preparation of the operating field. Method of tooth extraction due to anatomical conditions, structure and mechanism of action of instruments. Location and position of the doctor and the patient when during extraction of the teeth. Instruments. Types of forceps, elevators, their structure, mechanism of operation, purpose. Tooth extraction with forceps. Separate stages of tooth extraction with forceps. Features of removal of separate groups of teeth and roots. Technique and mechanics of application of elevators of different types. Wound healing after typical tooth extraction.

Topic №11. Operation of atypical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.

Atypical tooth extraction. Instruments for atypical tooth extraction, their structure and principles of operation. Indications and contraindications to atypical tooth extraction surgery. Features of patient preparation and surgery in patients with changes in the cardiovascular system, blood diseases and other systemic disorders, pregnant women and children.

The method of removing the third molar on the upper and lower jaw with incomplete eruption or incorrect position. Atypical tooth extraction: indications, methods, anesthesia, instruments. Wound treatment after tooth extraction and care.

Topic №12. Complications during tooth extraction (bleeding, alveolitis). Their treatment and prevention. Perforation of the maxillary sinus. Principles of plastic closure.

Complications during tooth and root removal. Hitting the tooth in the airways and digestive tract. Fracture and dislocation of adjacent teeth. Fracture of parts of the alveolar process, fracture and dislocation of the jaws. Damage of the bottom of the maxillary sinus and pushing the tooth root inside it. Bleeding during tooth extraction, its prevention. Therapeutic tactics for these complications, their prevention.

Topic 13. Periapical and marginal inflammatory processes of the periodontium. Surgical methods of treatment of chronic periodontitis.

Chronic periodontitis. Classification. Clinical and radiological diagnostics, differential diagnostics, surgical methods of treatment.

Operations: resection of the apex of the tooth root, hemisection, amputation of the tooth root, replantation, tooth transplantation, etc.

Tooth replantation operation (types of operations, methods of tooth extraction and treatment). Features of fusion after replantation. Indications for surgery and technique of its implementation on different groups of teeth. Possible complications and prognosis.

Topic 14. Acute serous and purulent periostitis. Differential diagnosis, surgical and conservative treatment. Odontogenic osteomyelitis of the jaws. Diagnostics and treatment methods.

Acute serous and purulent periodontitis. Etiology, pathogenesis, pathological anatomy, ways of spreading the infectious process. Clinic, diagnosis, differential diagnosis, surgical treatment.

Acute purulent periostitis of the jaws. Pathogenetic connection with periodontitis. The spread of the inflammatory process depends on the location of the roots of different groups of teeth. Pathological anatomy. Clinical picture. Differential diagnosis. Treatment. Indications for tooth extraction in the case of acute odontogenic periostitis of the jaws.

Subacute and chronic stages of osteomyelitis of the jaws. Clinical and radiological picture of its various forms (sequestering, rarifying, hyperplastic), differential diagnosis. Features of the course on the upper and lower jaws. Primary chronic osteomyelitis. Comprehensive treatment at different stages of development. The course of osteomyelitis of the upper and lower jaws of various origins. Treatment depending on the pathogenesis of the disease. Terms and technique of

sequestration. Possible complications: resorption fracture, defect and deformity of the jaws, sepsis, pneumonia, etc. Other forms of osteomyelitis: Garre, Brody, radiation osteonecrosis.

Topic 15. Odontogenic abscess/phlegmon of fibrous spaces of MFA. Differential diagnosis and surgical and conservative treatment.

Diagnostic puncture technique. Methods of opening a subperiosteal abscess. Differential diagnosis of abscesses and phlegmon localization of different cellular spaces. Method of drainage of abscesses and phlegmon of MFA. Postoperative medical support.

Topic 16. Acute and chronic odontogenic maxillary sinusitis. Modern methods of diagnosis and treatment.

Anatomical background of occurrence of the acute maxillary sinusitis. Etiology, pathogenesis. Classification. Chronic odontogenic sinusitis: classification, clinic, diagnosis, differential diagnosis, methods of surgical and conservative treatment. Methods of surgical interventions.

Anatomical background of occurrence of the chronic maxillary sinusitis. Etiology, pathogenesis. Classification. Acute odontogenic sinusitis. Methods of diagnosis and treatment. Oro-antral connections. Clinic, diagnosis, indications for their closure. Methods of surgical interventions. Prevention of oro-antral connections.

Topic 17. Furuncles and carbuncles of the face. Acute serous and purulent lymphadenitis. Methods of diagnosis and treatment.

Anatomy and functions of the lymphatic system of the face and neck, classification. Acute and chronic lymphadenitis. Abscessing lymphadenitis. Adenoflegmon. Diagnosis and differential diagnostics, clinic, treatment. Endolymphatic therapy.

Furuncles and carbuncles of the face. Clinical flow, treatment, prevention of complications. Erysipelas inflammation. Noma, etiology, pathological anatomy, prevention, treatment. Complications and consequences. Necrotic processes of tissues of the maxillofacial area of another origin.

Complications of inflammatory processes in the maxillofacial area. Diphtheria. Spread. Clinical flow, diagnostics, prevention.

Topic 18. Postoperative treatment of patients with inflammatory diseases of the maxillofacial area.

Postoperative treatment of periostitis. Postoperative treatment of maxillary sinusitis. Postoperative treatment of odontogenic abscesses and phlegmon.

Topic №19. Methods of examination of the patients with traumatic injuries of maxillo-facial area.

Complaints at the time of admission to the hospital.

Medical history: disease development, its dynamics, previous treatment.

Life history: hereditary, transmitted and comorbidities, bad habits - drug use, alcohol, smoking ; heredity, allergy history.

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

Examination of the maxillofacial area. Face 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 the salivary glands and their ducts, temporomandibular joints, lymphatic system of the face and neck. Establishing the nature and volume of defects and deformations of facial tissues and oral cavity, the condition of surrounding tissues. Assessment of the degree of anatomical, functional and aesthetic disorders.

Objective research methods with the use of modern diagnostic equipment. Radiological: radiography, tomography, panoramic radiography and pantomography. Application of artificial contrast. Computed tomography and magnetic resonance imaging, radioisotope, ultrasound diagnostics, remote and contact thermography. Morphological methods: cytological examination of prints, scrapes, puncture material; histological examination of biopsy material. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnostics. Use of computed tomography in diagnostics: decoding of radiographs, planning of operations, results of treatment.

The volume of examination of patients with pathology of the maxillofacial area during treatment in the clinic and hospital, participation of related specialists in the examination.

Topic №20. Traumatic injuries of soft tissues of the maxillofacial area. Primary surgical treatment of facial wounds.

Principles of primary surgical treatment of facial wounds. Methods of suturing wounds of the mucous membrane of the oral cavity. Methods of suturing facial skin wounds. Methods of primary surgical treatment of penetrating wounds of the face.

Topic №21. Traumatic injuries of the teeth. Fracture, complete and incomplete tooth dislocation. Tooth replantation, methods of immobilization.

Tooth injuries. Immobilization of teeth. Jaw fractures. Temporary and permanent immobilization. Its types. Interdental ligature ligation, standard transport bandages. Orthopedic methods of jaw fixation. Arch bars, their types. Tooth splints, their types. Dentoalveolar splints.

Topic №22. Examination of patients with fractures of the bones of the facial skeleton. Orthopedic methods of jaw immobilization. Dental arch bars and splints. Methods of their production. Dento-gingival and gingival splints. Indications for their use.

Jaw fractures. Temporary and permanent immobilization. Its types. Interdental ligature ligation, standard transport bandages. Orthopedic methods of jaw fixation. Tooth splints, their types. Dento-gingival splints. Arch bars: indications for their use. Surgical and orthopedic methods of fixation of fragments.

Topic №23. Burns of maxillofacial tissues. Methods of treatment.

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

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

Chemical injury: acids, alkali, etc.

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

Topic №24. Treatment and prevention of complications of traumatic injuries of the maxillofacial area (traumatic osteomyelitis, traumatic maxillary sinusitis, etc.). Algorithm of actions of a dental surgeon at an outpatient appointment.

Early local and general complications of the injuries of MFA. Prolonged tissue compression syndrome of the face. Medical care at place of injury and during medical evacuation. Late local and general complications of the maxillofacial injuries. Prevention of their occurrence. Considering the anatomical and physiological features of MFA, with its non-gunshot and gunshot wounds, there may be a number of complications (bleeding, asphyxia, shock) that are life-threatening. Therefore, the dental surgeon should be able to give timely evaluation of the patient, health care, determine the sequence of medical evacuation and prevention of complications.

Late local and general of the injuries of MFA.

- Immediate (asphyxia, bleeding, traumatic shock).
- Delayed complications (suppuration of wounds, abscess and phlegmon of soft tissues, post-traumatic osteomyelitis, post-traumatic maxillary sinusitis, secondary bleeding due to thrombus meltdown, sepsis).
- Long-term complications (scar deformity of soft tissues, defects of soft tissues, adentia and death of the rudiments of permanent teeth, deformity of the jaws, irregular jaw fracture, malocclusion, bone defects, false joint, delayed growth of jaws, ankylosis and other diseases of temporo-mandibular joint).

Topic №25. Postoperative treatment of patients with inflammatory and traumatic diseases of the MFA.

Postoperative treatment of periostitis. Postoperative treatment of maxillary sinusitis. Postoperative treatment of odontogenic abscesses and phlegmon.

Postoperative treatment of traumatic injuries of soft tissues of MFA. Postoperative treatment of traumatic injuries of the facial bones.

Topic №26. Final control.

The list of questions that the student must study to master the topics of manufacturing medical practice from surgical dentistry

1. Principles of organization of dental care for the population of Ukraine.
2. Organization of the surgical department (office) of the dental clinic.
3. Features 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 office (department).
6. Indications for hospitalization of surgical dental patients.
7. The concept of asepsis, disinfection, sterilization, their methods.
8. General principles and methods of asepsis.
9. Preparation of the premises of the surgical dental department (office) of the polyclinic and hospital.
10. Preparing the surgeon's hands.
11. Preparing the operating field.
12. Methods of preparation of the tools and dressings (disinfection and sterilization), their storage.
13. General principles and methods of antiseptics.
14. Ways of transmission of infection in the surgical dentistry
15. Subjective examination of a surgical dental patient (complaints, medical history, life history).
16. Methods of examination of the general condition of a surgical dental patient.
17. Methods of local examination (extraoral and intraoral) of a surgical dental patient.
18. Additional examination methods (electroodontometry, radiography, morphological, microbiological, functional studies).
19. microbiological, functional studies).
20. Indications for hospitalization of surgical dental patients.

21. Instruments for examination of a surgical dental patient.
22. Instruments for local anesthesia in dentistry.
23. Instruments for extraction of the teeth.
24. Instruments for separation and joining of the tissues.
25. Classification of conduction anesthesia of the mandible.
26. Mandibular anesthesia: needle injection site, direction and depth of needle advance, target of anesthesia, amount of anesthetic injected. Clinical effect of anesthesia. Anesthesia area
27. Torus anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia.
28. Mental anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
29. Anesthesia of the lingual nerve: the injection site of the needle, the direction and depth of the needle, the target point of anesthesia, the amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
30. Cheek nerve anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
31. Local complications during anesthesia on the lower jaw, causes. Clinical manifestations.
32. Classification of conduction anesthesia of the maxilla.
33. Infraorbital anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia.
34. Tuberal anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia area
35. Cutting anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia area.
36. Palatal anesthesia: site of needle injection, direction and depth of needle advance, target of anesthesia, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
37. Extraoral techniques of anesthesia on the upper jaw. Indications for use.
38. Anesthesia of the upper dental plexus (plexus anesthesia).
39. Local complications when performing anesthesia on the upper jaw, the reasons for their occurrence. Precautions. Clinical manifestations.
40. Providing care to the patient in case of complications
41. Position of the patient in the chair when removing teeth on the upper jaw.
42. Position of the patient in the chair when removing teeth on the lower jaw.
43. Position of the doctor regarding the patient with removal of teeth on the upper jaw.
44. Position of the doctor regarding the patient when removing teeth on the lower jaw.
45. Stages of the operation of tooth extraction.
46. Movements characteristic of the removal of single-rooted teeth.
47. Movements characteristic of the removal of multiple-rooted teeth
48. The first movements of the forceps, depending on the group of teeth.
49. Features of the removal of tooth roots. Instruments
50. Method of periostotomy operation
51. Method of root apex resection operation.
52. Method of compactosteotomy operation
53. Method of tooth hemisection operation.
54. Method of root amputation operation tooth.
55. Classification, clinic, diagnosis, treatment of traumatic soft tissue injuries of the MFA.
56. Classification, clinic, diagnosis, treatment of injuries of the teeth.
57. Classification, clinic, diagnosis, treatment of traumatic injuries of the facial skeleton.
58. Emergency care for traumatic injuries of the tissues of the MFA.
59. Principles of primary surgical treatment of facial wounds.
60. Techniques of primary surgical treatment of penetrating facial wounds
61. Reposition, replantation and immobilization of teeth.
62. Common complications that occur during tooth extraction.
63. Fracture of a tooth or its root.
64. Fracture, dislocation and removal of an adjacent tooth
65. Fracture of the mandible
66. Fracture of part of the alveolar process.
67. Fracture of the tuber of the upper jaw.
68. Dislocation of the mandible.
69. Injuries of the soft tissues.
70. Dislocation of the tooth or its root into the soft tissues.
71. Alveolitis.
72. Treatment of periostitis.
73. Treatment of maxillary sinusitis.
74. Treatment of odontogenic abscesses and phlegmons.

75. Treatment of traumatic soft tissue injuries of the MFA.
 76. Treatment of traumatic MFA bone injuries.

3. Structure of the educational discipline

№	Topic	Practical lessons	Independent study
1.	The structure and organization of surgical dentistry for the population of Ukraine. Acquaintance with the work of a dental surgeon. Identification of risk factors for the development of major dental diseases depending on the anatomical and physiological features of the structure of the maxillofacial area.	6	6
2.	Methods of examination of the patient. Algorithm of dental examination of a patient with surgical dental pathology. Subjective and objective methods of diagnostics.	6	6
3.	Sanitary and epidemic requirements for the work of a dental surgeon. Asepsis and antiseptics in surgical dentistry.	6	6
4.	Dental instruments are recommended for performing surgical manipulations in the oral cavity.	6	6
5.	Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: tuberal and palatal anesthesia.	6	6
6.	Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: infraorbital, incisal anesthesia.	6	6
7.	Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: oral, buccal, and lingual anesthesia.	6	6
8.	Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: mandibular and torus anesthesia, Berchet anesthesia.	6	6
9.	Local and general complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.	6	6
10.	Operation of a typical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.	6	6
11.	Operation of atypical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.	6	6
12.	Complications during tooth extraction (bleeding, alveolitis). Their treatment and prevention. Perforation of the maxillary sinus. Principles of plastic closure.	6	6
13.	Periapical and marginal inflammatory processes of the periodontium. Surgical methods of treatment of chronic periodontitis.	6	6
14.	Acute serous and purulent periostitis. Differential diagnosis, surgical and conservative treatment. Odontogenic osteomyelitis of the jaws. Diagnostics and treatment methods.	6	6
15.	Odontogenic abscess/phlegmon of fibrous spaces of SCD. Differential diagnosis and surgical and conservative treatment.	6	6

16.	Acute and chronic odontogenic maxillary syncytitis. Modern methods of diagnosis and treatment.	6	6
17.	Furuncles and carbuncles of the face. Acute serous and purulent lymphadenitis. Methods of diagnosis and treatment.	6	6
18.	Postoperative treatment of patients with inflammatory diseases of the maxillofacial area.	6	6
19.	Methods of examination of patients with traumatic injuries of the maxillofacial area.	6	6
20.	Traumatic injuries of soft tissues of the maxillofacial area. Primary surgical treatment of facial wounds.	6	6
21.	Traumatic injuries of the teeth. Fracture, complete and incomplete tooth dislocation. Tooth replantation, methods of immobilization.	6	6
22.	Examination of patients with fractures of the bones of the facial skeleton. Orthopedic methods of jaw immobilization. Dental arch bars and splints. Methods of their production. Dento-gingival and gingival splints. Indications for their use.	6	6
23.	Burns of maxillofacial tissues. Methods of treatment.	6	6
24.	Treatment and prevention of complications of traumatic injuries of the maxillofacial area (traumatic osteomyelitis, traumatic maxillary sinusitis, etc.). Algorithm of actions of a dental surgeon at an outpatient appointment.	6	6
25.	Postoperative treatment of patients with traumatic diseases of the maxillofacial area.	4	6
26.	Final control	2	-
	Total	150	150
	Final control	Differential credit	

4. Lectures – not planned in the curriculum.

5. Thematical plan of practical lessons

№	Topic	Hours
1.	The structure and organization of surgical dentistry for the population of Ukraine. Acquaintance with the work of a dental surgeon. Identification of risk factors for the development of major dental diseases depending on the anatomical and physiological features of the structure of the maxillofacial area.	6
2.	Methods of examination of the patient. Algorithm of dental examination of a patient with surgical dental pathology. Subjective and objective methods of diagnostics.	6
3.	Sanitary and epidemic requirements for the work of a dental surgeon. Asepsis and antiseptics in surgical dentistry.	6
4.	Dental instruments are recommended for performing surgical manipulations in the oral cavity.	6
5.	Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: tuberal and palatal anesthesia.	6
6.	Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: infraorbital, incisal anesthesia.	6
7.	Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: oral, buccal, and lingual anesthesia.	6
8.	Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: mandibular and torus anesthesia, Berchet anesthesia.	6
9.	Local and general complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.	6
10.	Operation of a typical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.	6
11.	Operation of atypical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.	6
12.	Complications during tooth extraction (bleeding, alveolitis). Their treatment and prevention. Perforation of the maxillary sinus. Principles of plastic closure.	6
13.	Periapical and marginal inflammatory processes of the periodontium. Surgical methods of treatment of chronic periodontitis.	6
14.	Acute serous and purulent periostitis. Differential diagnosis, surgical and conservative treatment. Odontogenic osteomyelitis of the jaws. Diagnostics and treatment methods.	6
15.	Odontogenic abscess/phlegmon of fibrous spaces of MFA. Differential diagnosis and surgical and conservative treatment.	6
16.	Acute and chronic odontogenic maxillary sinusitis. Modern methods of diagnosis and	6

	treatment.	
17.	Furuncles and carbuncles of the face. Acute serous and purulent lymphadenitis. Methods of diagnosis and treatment.	6
18.	Postoperative treatment of patients with inflammatory diseases of the maxillofacial area.	6
19.	Methods of examination of patients with traumatic injuries of the maxillofacial area.	6
20.	Traumatic injuries of soft tissues of the maxillofacial area. Primary surgical treatment of facial wounds.	6
21.	Traumatic injuries of the teeth. Fracture, complete and incomplete tooth dislocation. Tooth replantation, methods of immobilization.	6
22.	Examination of patients with fractures of the bones of the facial skeleton. Orthopedic methods of jaw immobilization. Dental arch bars and splints. Methods of their production. Dento-gingival and gingival splints. Indications for their use.	6
23.	Burns of maxillofacial tissues. Methods of treatment.	6
24.	Treatment and prevention of complications of traumatic injuries of the maxillofacial area (traumatic osteomyelitis, traumatic maxillary sinusitis, etc.). Algorithm of actions of a dental surgeon at an outpatient appointment.	6
25.	Postoperative treatment of patients with traumatic diseases of the maxillofacial area.	4
26.	Final control	2
	Total	150

6. Thematical plan for student's independent work

№	Topic	Hours	Type of control
1.	The structure and organization of surgical dentistry for the population of Ukraine. Acquaintance with the work of a dental surgeon. Identification of risk factors for the development of major dental diseases depending on the anatomical and physiological features of the structure of the maxillofacial area.	6	Current control on practical lessons
2.	Methods of examination of the patient. Algorithm of dental examination of a patient with surgical dental pathology. Subjective and objective methods of diagnostics.	6	
3.	Sanitary and epidemic requirements for the work of a dental surgeon. Asepsis and antiseptics in surgical dentistry.	6	
4.	Dental instruments are recommended for performing surgical manipulations in the oral cavity.	6	
5.	Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: tuberal and palatal anesthesia.	6	
6.	Techniques of local anesthesia during outpatient surgical interventions on the upper jaw: infraorbital, incisal anesthesia.	6	
7.	Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: oral, buccal, and lingual anesthesia.	6	
8.	Techniques of local anesthesia during outpatient surgical interventions on the lower jaw: mandibular and torus anesthesia, Berchet anesthesia.	6	
9.	Local and general complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.	6	
10.	Operation of a typical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.	6	
11.	Operation of atypical tooth extraction - indications, method of carrying out, instruments, stages of carrying out.	6	
12.	Complications during tooth extraction (bleeding, alveolitis). Their treatment and prevention. Perforation of the maxillary sinus. Principles of plastic closure.	6	
13.	Periapical and marginal inflammatory processes of the periodontium. Surgical methods of treatment of chronic periodontitis.	6	
14.	Acute serous and purulent periostitis. Differential diagnosis, surgical and conservative treatment. Odontogenic osteomyelitis of the jaws. Diagnostics and treatment methods.	6	
15.	Odontogenic abscess/phlegmon of fibrous spaces of MFA. Differential diagnosis and surgical and conservative treatment.	6	
16.	Acute and chronic odontogenic maxillary sinusitis. Modern methods of diagnosis and treatment.	6	
17.	Furuncles and carbuncles of the face. Acute serous and purulent lymphadenitis. Methods of diagnosis and treatment.	6	
18.	Postoperative treatment of patients with inflammatory diseases of the maxillofacial area.	6	
19.	Methods of examination of patients with traumatic injuries of the maxillofacial area.	6	

20.	Traumatic injuries of soft tissues of the maxillofacial area. Primary surgical treatment of facial wounds.	6	
21.	Traumatic injuries of the teeth. Fracture, complete and incomplete tooth dislocation. Tooth replantation, methods of immobilization.	6	
22.	Examination of patients with fractures of the bones of the facial skeleton. Orthopedic methods of jaw immobilization. Dental arch bars and splints. Methods of their production. Dento-gingival and gingival splints. Indications for their use.	6	
23.	Burns of maxillofacial tissues. Methods of treatment.	6	
24.	Treatment and prevention of complications of traumatic injuries of the maxillofacial area (traumatic osteomyelitis, traumatic maxillary sinusitis, etc.). Algorithm of actions of a dental surgeon at an outpatient appointment.	6	
25.	Postoperative treatment of patients with traumatic diseases of the maxillofacial area.	6	
Total		150	

7. Individual tasks - not planned in the curriculum.

8. Tasks for self-study work

Self-study work of students includes:

- abstracts of theoretical material, solution of situational tasks, control questions on relevant subjects of independent work, etc.;
- creation of multimedia presentations on selected topics of independent work;
- creation of poster presentations on selected topics of independent work;
- writing a medical history according to selected nosologies;
- preparation for classroom classes (practical);
- performance of tasks in the academic discipline during the semester;
- work on individual topics of academic disciplines, which, according to the working curriculum of the discipline, are assigned to students for independent study;
- preparation for all types of control works;
- work in student scientific circles and centers, etc.;
- participation in the work of "round tables", etc.;
- participation in scientific and scientific-practical conferences, Olympiads, etc.;

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

- group and individual consultations;
- interviews with students;
- systematic control over students' performance of tasks recommended for independent study;
- providing students with means for self-control (tests, packages of control questions and situational problems);
- analysis and evaluation of the student's work.

9. Methods of education

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

- Law of Ukraine "On Higher Education" dated 01.07.2014 №1556-VII;
- Regulations on the practice of students of higher educational institutions of Ukraine Approved by the order of the Ministry of Education of Ukraine dated April 8, 1993 №93;
- Resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 №266 "On approval of the list of branches of knowledge and specialties for which higher education is carried out"
- Order of the Ministry of Education and Science of Ukraine №1151 dated 06.01.2015 branches of knowledge and specialties for which higher education students are trained, approved by the Cabinet of Ministers of Ukraine dated 29.04.2015 №266 ";
- Order of the Ministry of Education and Science of Ukraine №47 from 26.01.2015" On the peculiarities of curriculum formation ", registered in the Ministry of Justice of Ukraine on 04.02.2015 for 32132/26577;
- letter of the Ministry of Health of Ukraine dated 25.07.2016 №08.01-30/19087;
- order of the rector of LNMU named after Danylo Halytsky dated 02.06.2016 № 1604 "On approval of curriculum";

- regulations on the organization of the educational process at the Danylo Halytskyi Lviv National Medical University, approved by the Academic Council of the Danylo Halytskyi LNMU on February 18, 2015 protocol №1-VR;
- by the decision of the Academic Council of LNMU named after Danylo Halytsky (protocol №8-VR dated 16.09.2015)
- the curriculum of the discipline "industrial medical practice in surgical dentistry" for students of III, IV and V courses of the Dental Faculty .

According to the curriculum of manufacturing medical practice on the 4th year it is provided when the student has acquired knowledge of the main clinical disciplines (therapeutic dentistry, orthopedic dentistry, surgical dentistry, pharmacology), with which the program of manufacturing practice is integrated. In turn, the practice forms the basis for further study of clinical disciplines by students - therapeutic dentistry, orthopedic dentistry, surgical dentistry, which involves integration with these disciplines "vertically" and the formation of skills to apply knowledge in further study and professional activities. Manufacturing medical practice of 4th year students (surgical dentistry) lasts for 2 weeks in the surgical department of a dental polyclinic or maxillofacial department of the hospital.

Industrial practice in surgical dentistry is carried out in the winter. The internship provides students with independent mastery of practical skills according to the educational-professional training program (EPTP) and educational-qualification characteristics (EQC), which is controlled by the heads of base practice manager. In order to master the manual skills of surgical dental care, along with the study of theoretical issues, students practice manipulations, under the guidance and control of a direct supervisor from the practice base independently examine patients with various pathological processes of MFA, symptoms of surgical dental diseases, acquire skills in the diagnosis of maxillofacial disorders and diseases, their treatment, examination and rehabilitation. The current educational activity of students is evaluated by direct supervisors from the base of practice.

The final control of the manufacturing medical practice is made on the last day of practice after its completion. The control is carried out by teachers of profile departments in the presence of the base practice supervisor.

10. Methods of control.

Forms of control and assessment system are carried out in accordance with the requirements of the program of industrial medical practice for students of the 4th year of the Faculty of Dentistry. The implementation of practical skills is checked daily by the immediate supervisor of the practice from the base and endorses their implementation in the student's practice diary. The University practice manager systematically monitors the diaries of students.

The current control is carried out in accordance with specific objectives. One of the activities of students and its control by the head of the practice base is to keep a diary of manufacturing practice (see Annex 1). The diary is the main document for the period of manufacturing practice, including its defence. Students are required to keep a diary of each day during the practice. In it, in the general sequence socially useful work (issues of sanitary bulletins, writing of abstracts, carrying out of conversations in the organized collectives, etc.) is reflected.

The student must submit a daily diary for review and signature to the base practice manager.

Upon completion of the practice, the student fills out a final report on the performed work. At the end of the practice, after filling in digital and text reports, the student is issued a characteristics and review of the diary signed by the base practice manager and base practice supervisor (see Annex 1).

When writing a review of the diary the responsible person should reflect the following indicators: the level of theoretical knowledge of student, mastery of practical skills, knowledge of recipes, adherence to ethics and deontology, the student's attitude to mastering new practical skills, knowledge of medical records and diary.

The characteristics must be confirmed by the seal of the medical institution where the practice was conducted. The presence of fully completed diary with strict accordance to the instructions and confirmed by the signature of the base practice manager with the final report are mandatory for admission of students to the final lesson.

The program used the following assessment system.

Current control. The head of the practice base daily analyzes and monitors the work of students in the departments (the student should not have passes), the quality of diary, the quality of mastering the practical skills defined in the list, the application of ethics and deontology in practice. practical skills, the student describes in detail and justifies the method of conducting it to the immediate supervisor from the base of practice. After the description of the manipulation, the student may be allowed to perform it in the clinic under the supervision of the base managers.

The current assessment of skills and practical skills is as follows:

№	Abilities and Practical Skills	Points (from 3 to 5)	Base Manager Signature
1.	To demonstrate the ability to apply the principles of medical deontology in surgical dental practice.		
2.	To demonstrate the skills in modern methods and principles of sanitary-educational work.		
3.	To identify the main structural units of the organization of dental surgical care for the		

	population of Ukraine.		
4.	To demonstrate the ability to collect complaints and anamnesis.		
5.	To demonstrate the ability to complete medical records.		
6.	To carry out palpation of inflammatory diseases, injuries of the soft tissues and bones of maxillofacial area.		
7.	To be able to take a smear, a print for cytological examination.		
8.	To be able to perform local anesthesia of the maxillofacial area (application, infiltration).		
9.	To be able to perform conductive anesthesia on the upper jaw.		
10.	To be able to perform conductive anesthesia on the lower jaw.		
11.	To be able to perform a typical tooth extraction.		
12.	To be able to perform atypical tooth extraction.		
13.	To be able to perform extraction teeth with partial and full retention.		
14.	To be able to open subperiosteal abscesses.		
15.	To be able to open the inflammatory processes of the soft tissues.		
16.	To demonstrate dissection or excision of the mucous membrane in case of the pericoronitis.		
17.	To be able to provide removal of sequestrers in case of limited osteomyelitis.		
18.	To be able to stop bleeding after tooth extraction.		
19.	To be able to perform tamponade or suturing of the alveolar socket in case of perforation of the maxillary sinus.		
20.	To be able to make a puncture in the inflammatory processes of the maxillofacial area.		
21.	To be able to perform surgical treatment of chronic periodontitis (resection of the apex, hemisection, amputation, coronary-radicular separation, replantation).		
22.	To be able to perform probing of the salivary fistula, ducts of salivary glands, removal of salivary stones from the ducts.		
23.	To be able to perform surgical treatment in case of trauma of the teeth and soft tissues of the maxillofacial area.		
24.	To demonstrate the methods of providing of the first aid – artificial respiration, closed heart massage.		
Total points for mastering practical skills (72-120):			

- “5” points – receives a student who has given orally or in writing the proposed manipulation and thoroughly described it at a quite high level of theoretical and practical mastering of skills and fully demonstrated them.
- “4” points – receives a student who has given orally or in writing the proposed manipulation and gave theoretical description, admitted with insignificant mistakes. Volume demonstration of the practical skills was sufficient.
- “3” points – receives a student who has given orally or in writing description of the proposed manipulation and gave theoretical description, admitted with serious mistakes. The student has demonstrated only the simplest level of performance of the practical skills.

Practical skills are not counted to the student, who did not set out the essence of the practical skills in written form and / or hasn't provided its adequate theoretical description. The student didn't learn practical skills during the practice.

11. Form of final control of academic performance - differential credit.

Final control students make on the last day of practice to the commission, which includes managers of practice from the University and, if possible, from the bases of practice. A student who has 100% completed the program of practice, provided reasonable answers to questions about the content of the diary, and scored the minimum number of points for the current control (72 points), submitted a report on practice and got a positive description from the Base practice supervisor is allowed to defend the practice on the final lesson.

Evaluation criteria of the practice final control:

Practical skill 1 -	collecting of complaints, medical history.
Practical skill 2 -	examination of the patient, instrumental examination, interpretation of additional methods of examination.
Practical skill 3 -	setting of preliminary diagnosis, plan of treatment and filling in the appropriate documentation.

Practical skill 4 -	performing of medical manipulations.
Practical skill 5 -	appointment of postoperative treatment, recommendations.

Concluding lesson of medical practice for students of the 4th year involves solving of two situational tasks, including description of theoretical and demonstration of practical skills:

Number of points for final lesson is charged according to the existing provision from 50 to 80 points and consists of the sum of scores for both situational tasks. The possible number of points for a situational task is from 25 to 40 and consists of an amount of points for each of the five practical skills.

8 points – receives a student who has written the proposed manipulation and thoroughly described it at a quite high level of theoretical and practical mastering of skills and fully demonstrated them.

7 points – receives a student who has written the proposed manipulation and gives theoretical description, admitted with insignificant mistakes. Volume demonstration of the practical skills was sufficient.

6 points – receives a student who has written the proposed manipulation and gives theoretical description, admitted with serious mistakes. The student has demonstrated only the simplest level of performance of the practical skills.

5 points – receives a student who has written the proposed manipulation and gives theoretical description with significant mistakes. The student was unable to demonstrate practical skills

Practical skills are not counted to the student, who did not set out the essence of the practical skills in written form and / or hasn't provided its adequate theoretical description. The student didn't learn practical skills during the practice.

12. Scheme of counting and distribution of points received by students:

The mark for practice consists of the sum of points for performance by the student of practical skills which are checked by the base practice manager (maximum 120 points - minimum 72 points), and points for final control which are exposed at carrying out the differentiated credit (maximum 80 points - minimum 50 points).

Course scores are independently converted to both the ECTS scale and the 4-point scale.

Students who study in one speciality are ranked on the ECTS scale as follows:

ECTS rank	Statistical indicator
A	The best 10 % of the students
B	Next 25 % of the students
C	Next 30 % of the students
D	Next 25 % of the students
E	Last 10 % of the students

Points from the discipline for students who have successfully completed the program are converted into a traditional 4-point scale according to the absolute criteria, which are given in the table below:

Points from the discipline	Mark by 4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimum score of points that a student must earn	3
Below the minimum score of points that a student must earn	2

The mark for the practice is entered by the University practice manager into the diary, student's index book and credit-examination information. Within three days after the end of the practice, the University practice manager submits the information to the relevant dean's office, the report on the practice - to the department of practice of the University. The practice diary is kept at the department for 1 year.

13. Methodical support: abstracts, extended plans and multimedia presentations of lectures, plans of practical lessons, independent work, lists of questions, tasks and cases for current, final and self-control of knowledge and skills of students, lists and algorithms of performance of practical skills. tests for self-control to assess the input and output level of knowledge on the topics of practical training, diary of manufacturing practice, methodical guides.

List of practical skills:

1. To demonstrate the ability to apply the principles of medical deontology in surgical dental practice.
2. To demonstrate the skills in modern methods and principles of sanitary-educational work.
3. To identify the main structural units of the organization of dental surgical care for the population of Ukraine.
4. To demonstrate the ability to collect complaints and anamnesis.
5. To demonstrate the ability to complete medical records.
6. To carry out palpation of inflammatory diseases, injuries of the soft tissues and bones of maxillofacial area.
7. To be able to take a smear, a print for cytological examination.

8. To be able to perform local anesthesia of the maxillofacial area (application, infiltration).
9. To be able to perform conductive anesthesia on the upper jaw.
10. To be able to perform conductive anesthesia on the lower jaw.
11. To be able to perform a typical tooth extraction.
12. To be able to perform atypical tooth extraction.
13. To be able to perform extraction teeth with partial and full retention.
14. To be able to open subperiosteal abscesses.
15. To be able to open the inflammatory processes of the soft tissues.
16. To demonstrate dissection or excision of the mucous membrane in case of the pericoronitis.
17. To be able to provide removal of sequestrers in case of limited osteomyelitis.
18. To be able to stop bleeding after tooth extraction.
19. To be able to perform tamponade or suturing of the alveolar socket in case of perforation of the maxillary sinus.
20. To be able to make a puncture in the inflammatory processes of the maxillofacial area.
21. To be able to perform surgical treatment of chronic periodontitis (resection of the apex, hemisection, amputation, coronary-radicular separation, replantation).
22. To be able to perform probing of the salivary fistula, ducts of salivary glands, removal of salivary stones from the ducts.
23. To be able to perform surgical treatment in case of trauma of the teeth and soft tissues of the maxillofacial area.
24. To demonstrate the methods of providing of the first aid – artificial respiration, closed heart massage.

List of questions for selfcontrol

1. Principles of organization of dental care for the population of Ukraine.
2. Organization of the surgical department (office) of the dental clinic.
3. Features 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 office (department).
6. Indications for hospitalization of surgical dental patients.
7. The concept of asepsis, disinfection, sterilization, their methods.
8. General principles and methods of asepsis.
9. Preparation of the premises of the surgical dental department (office) of the polyclinic and hospital.
10. Preparing the surgeon's hands.
11. Preparing the operating field.
12. Methods of preparation of the tools and dressings (disinfection and sterilization), their storage.
13. General principles and methods of antiseptics.
14. Ways of transmission of infection in the surgical dentistry
15. Subjective examination of a surgical dental patient (complaints, medical history, life history).
16. Methods of examination of the general condition of a surgical dental patient.
17. Methods of local examination (extraoral and intraoral) of a surgical dental patient.
18. Additional examination methods (electroodontometry, radiography, morphological, microbiological, functional studies).
19. Indications for hospitalization of surgical dental patients.
20. Instruments for examination of a surgical dental patient.
21. Instruments for local anesthesia in dentistry.
22. Instruments for extraction of the teeth.
23. Instruments for separation and joining of the tissues.
24. Classification of conduction anesthesia of the mandible.
25. Mandibular anesthesia: needle injection site, direction and depth of needle advance, target of anesthesia, amount of anesthetic injected. Clinical effect of anesthesia. Anesthesia area
26. Torus anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia.
27. Mental anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
28. Anesthesia of the lingual nerve: the injection site of the needle, the direction and depth of the needle, the target point of anesthesia, the amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
29. Cheek nerve anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
30. Local complications during anesthesia on the lower jaw, causes. Clinical manifestations.
31. Classification of conduction anesthesia of the maxilla.
32. Infraorbital anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia.
33. Tuberal anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia area
34. Cutting anesthesia: needle injection site, direction and depth of needle advance, anesthesia target, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia area.

36. Palatal anesthesia: site of needle injection, direction and depth of needle advance, target of anesthesia, amount of anesthetic administered. Clinical effect of anesthesia. Anesthesia zone.
37. Extraoral techniques of anesthesia on the upper jaw. Indications for use.
38. Anesthesia of the upper dental plexus (plexus anesthesia).
39. Local complications when performing anesthesia on the upper jaw, the reasons for their occurrence. Precautions. Clinical manifestations.
40. Providing care to the patient in case of complications
41. Position of the patient in the chair when removing teeth on the upper jaw.
42. Position of the patient in the chair when removing teeth on the lower jaw.
43. Position of the doctor regarding the patient with removal of teeth on the upper jaw.
44. Position of the doctor regarding to the patient when removing teeth on the lower jaw.
45. Stages of the operation of tooth extraction.
46. Movements characteristic of the removal of single-rooted teeth.
47. Movements characteristic of the removal of multiple-rooted teeth
48. The first movements of the forceps, depending on the group of teeth.
49. Features of the removal of tooth roots. Instruments
50. Method of periostotomy operation
51. Method of root apex resection operation.
52. Method of compactosteotomy operation
53. Method of tooth hemisection operation.
54. Method of root amputation operation tooth.
55. Classification, clinic, diagnosis, treatment of traumatic soft tissue injuries of the MFA.
56. Classification, clinic, diagnosis, treatment of injuries of the teeth.
57. Classification, clinic, diagnosis, treatment of traumatic injuries of the facial skeleton.
58. Emergency care for traumatic injuries of the tissues of the MFA.
59. Principles of primary surgical treatment of facial wounds.
60. Techniques of primary surgical treatment of penetrating facial wounds
61. Reposition, replantation and immobilization of teeth.
62. Common complications that occur during tooth extraction.
63. Fracture of a tooth or its root.
64. Fracture, dislocation and removal of an adjacent tooth
65. Fracture of the mandible
66. Fracture of part of the alveolar process.
67. Fracture of the tuber of the upper jaw.
68. Dislocation of the mandible.
69. Injuries of the soft tissues.
70. Dislocation of the tooth or its root into the soft tissues.
71. Alveolitis.
72. Treatment of periostitis.
73. Treatment of maxillary sinusitis.
74. Treatment of odontogenic abscesses and phlegmons.
75. Treatment of traumatic soft tissue injuries of the MFA.
76. Treatment of traumatic MFA bone injuries.

14. Summing of the practice

The results of the practice are summed up in the presence of all reporting documents provided by the practice program and the characteristics of the student's production activities during the practice, signed by the base practice manager and base practice supervisor.

Students who do not complete the program of the practice without important reason, receive an unsatisfactory grade for the practice and do not eliminate academic debt by the beginning of the next semester are expelled from the University.

Results of the practice are annually heard and discussed at the meeting of the department, the profile methodical commission, the Academic Council of the faculty and the Academic Council of the University.

15. Recommended literature

Basic:

1. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.] ; ed. V. Malanchuk. – Вінниця: Нова книга, 2011

2. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.] ; ed. V. Malanchuk. – Вінниця: Нова книга, 2011.

Additional: **II.**

1. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.
2. Bauml, Philips R.W., Lund M.R. Textbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661p.
3. Kharkov L. V. Pediatric oral and maxillofacial surgery : a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova ; ed. by L. V. Kharkov. - Kyiv : AUS Medicine Publishing, 2015. - 103 с.
4. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERY Third Edition, Vol. 1, 2012. - 2000 p.
5. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERY Third Edition, Vol. 2, 2012. - 1772 p.
6. 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) [Текст] : methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. - Lviv, 2011.
7. 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) [Текст] : methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. - Lviv, 2011.
8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. - Kyiv: OMF Publishing, 2016, 128 p.
9. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. – Lviv, 2007.