DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY

Department of Surgical Dentistry and Maxillofacial Surgery

"Confirmed"
First Vice-Rector
of scientific and pedagogical work
Assoc. Prof. Iryna Solonynko
«28» 07 2023

CURRICULUM OF THE EDUCATIONAL DISCIPLINE

(type of the discipline – mandatory)

MC 22.2 Fundamentals of Dentistry

training of specialists of the second (master's) level of higher education
Sphere of Knowledge 22 «Healthcare»
Specialty 222 «Medicine»
General medicine
Pediatrics
faculty, year: Medical, III

Discussed and approved
at educational-methodical meeting
of the department of surgical dentistry
and maxillofacial surgery
Protocol № 11
Dated from «13» 06 2023
Head of Chair,
prof. Yan Vares

Approved
by the Profile Methodical Commission
on stomatological disciplines
Protocol № 1
Dated from «16» 06 2023
Head of the Profile
Methodical Commission
prof. Yan Vares

Lviv – 2023

DEVELOPERS OF THE CURRICULUM

Head of Department, Prof. Vares Y.E.
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Head of Department of the Latin and Foreign languages, Assoc. Prof. Sodomora P. A.

INTRODUCTION
CURRICULUM Fundamentals of Dentistry
According to Standard of Second level of higher education second (master's degree)
Sphere of Knowledge 22 «Healthcare»
Specialty 222 «Medicine»
educational program of Master of Medicine

Course description (abstract). The discipline involves the study of therapeutic, orthopedic, surgical and pediatric dentistry in its main sections, with emphasis placed on the study of etiology, pathogenesis, clinics, diagnostics, emergency treatment and prevention of major and most common diseases of maxillo-facial area (MFA).

Special attention is paid to the formation of the student's skills of collecting anamnesis, conducting examination and differential diagnosis of MFA diseases with various clinical course and their complications. It is envisaged to get acquainted with the treatment-and-prophylactic measures, which are most often used in dental practice.

Studying the discipline of "fundamentals of dentistry" contributes to the formation of a holistic view of the structure and functioning of the organs of the MFA; deepening of theoretical and practical preparation, acquisition of professional practical skills for independent medical activity.

Structure of the discipline	**Number of credits, hours,including**				**Year of study/ semester**	**Test type**
	Total	**In class**		**Self-study**		
		Lectures (hours)	Practical (hours)			
Name of the discipline: Fundamentals of Dentistry	**0,5 credits / 15 hours.**	**-**	**8**	**7**	**III course (V/VI semesters)**	**Credit**

The subject of study of the discipline are the pathological processes of MFA, related to the competence of therapeutic, orthopedic, surgical and pediatric dentistry, features of their clinical course, the main diagnostic and therapeutic manipulations used in the practice of dentist.

Interdisciplinary connections: normal anatomy, histology, normal physiology, pathological physiology, topographic anatomy and operative surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, skin and venereal diseases, nerve diseases, otolaryngology, medicine of extreme conditions.

1. The purpose and objectives of the discipline

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

1.2. The main tasks of studying the discipline of " Fundamentals of Dentistry " are the ability to carry out examination of a dental patient, to diagnose the main symptoms and syndromes of MFA pathologies, to justify and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis of major diseases, identify and identify manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment in the clinic of surgical dentistry, identify different clinical options and complications of the most common diseases and diseases, to know measures of primary and secondary prevention of the most common dental diseases.

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.
- Principles of deontology and medicinal ethics in 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 a dentist (demonstrations, contraindications, features of conducting).
- Carious dental lesions (classification, diagnosis, treatment).
- Non-carious dental lesions (classification, diagnosis, treatment).
- Timing of temporary and permanent teeth eruption. Types of bite.
- General and local complications in 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).
- Diseases of the oral mucosa (types, clinical symptoms, diagnosis, treatment).
- Periodontitis (classification, causes, methods of diagnosis, treatment).
- Precancerous diseases of MFA. Diagnostic methods, choice of treatment tactics.
- Traumatic injuries of teeth. Classification, dental preservation impressions. First aid for dental injuries in children and adults.
- Traumatic injuries of the soft tissues of the MFA. Types of surgical treatment of wounds, principles of aid in various types of wounds of MFA.
- Traumatic injuries of MFA bones. Types of fractures of jaw bones. Differential diagnostics, 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).
- Benign and malignant neoplasms of MFA (differential diagnosis, treatment).
- Factors for the development of congenital defects of MFA. Classification of defects, clinical symptoms, methods of treatment, timing of plastic surgery, principles of patient rehabilitation, participation of speech therapist.
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To be able to:

- Collect anamnesis and to examine the patient for the specified pathology of MFA.
- Plan and conduct an examination of a patient with MFA pathology.
- Plan additional research methods and be able to interpret their results.
- Fill in appropriate medical records.
- Perform a diagnostic puncture of the MFA inflammatory disease.
- Take an inflammatory exudate sample to determine the antibiogram (study the species of microflora and its sensitivity to antibiotics).
- Take material from the wound surface for cytological examination (imprint, scraping) and smear on the glass slide.
- Assign an individualized premedication regimen, depending on the patient's psycho-somatic condition, nature and extent of surgery.
- Demonstrate techniques for preoperative cleaning of the surgeon's hands using modern techniques.
- Carry out on the phantom the technique of antiseptic cleaning of the operational field.
- Develop a plan for comprehensive examination and treatment of AIDS patients.
- Develop a plan for comprehensive treatment of patients with specified pathologies.
- Diagnose local and general complications in the practice of the dental surgeon.
- Conduct cardiopulmonary resuscitation (indirect heart massage and CPR) on the phantom.
- Provide aid in emergency situations in the practice of maxillo-facial surgery in accordance with appropriate algorithms.

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 according to the requirements of the NQF:

GC 1	Abstract thinking, analysis and synthesizing; the ability to learn and to be trained in accordance with the latest educational tools.
GC 2	Knowledge and understanding of the subject area and understanding of the profession.
GC 3	Ability to apply knowledge in practical situations.
GC 4	Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.
GC 5	Skills of using information and communication technologies.
GC 6	Ability to search, process and analyze information from various sources.
GC 7	Ability to adapt and act in an unfamiliar situations; the ability to work autonomously.
GC 8	Ability to set, identify and solve problems.
GC 9	Ability to choose a communication strategy.
GC 10	Ability to work in a team.
GC 11	Interpersonal skills.
GC 12	Ability to act on the basis of ethical considerations (motives).
GC 13	Skills for safe operation (following the labour safety regulations).
GC 14	Ability to assess and ensure the quality of work performed.
GC 15	Ability (and desire) to follow the environmentally friendly approach to work.
GC 16	Ability to act in a socially responsible and civic conscious manner.

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

SC 1	Collection of medical information on the patient's condition.
SC 2	Evaluation of the results of laboratory and instrumental research.
SC 3	Establishment of a clinical diagnosis of dental disease.
SC 4	Diagnosis of urgent conditions.
SC 5	Planning and conducting preventive measures for dental diseases.
SC 6	Determination of the nature and principles of treatment of dental diseases.
SC 7	Determination of the recommended mode of work, rest and diet in treatment of dental diseases.
SC 8	Determination of the management tactics in dealing with dental patient with somatic pathology.
SC 9	Execution of medical and dental manipulations.
SC 10	Conduct treatment of major dental diseases.
SC 11	Organization of medical and evacuation measures.
SC 12	Definition of tactics and provision of emergency medical care.

SC 13	Organization and conducting of dental medical examination of persons subject to dispensary supervision.
SC 14	Assessment of the environmental impact on the health of the population (individual, family, communal health).
SC 15	Maintaining medical records.
SC 16	Work with information sources of the state level, of social and medical origin.

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

Competency matrix

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

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

Learning outcomes

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

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

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

		12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 13, SC 14, SC 15, SC 16.
SLO 7	Analyze the epidemiological condition and carry out measures of mass and individual, general and local, medical and non-pharmacological prevention of dental diseases.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13; GC 14; GC 15, GC 16; SC 1, SC 5, SC 13, SC 14, SC 15, SC 16.
SLO 8	Make the treatment plan of a dental disease by making reasonable decisions (following a well-grounded approach) based on existing algorithms and standard schemes.	GC 1, GC 2, GC 3, GC 5, GC 6, GC 7, GC 8, GC 12, GC 13, GC 14; GC 15, GC 16; SC 1, SC 6, SC 15.
SLO 9	Determine and recommend the working regime, rest and necessary diet for treatment of dental diseases on the basis of a preliminary or final clinical diagnosis by making reasonable decisions (following a well-grounded approach) based on existing algorithms and standard schemes.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 7, SC 15.
SLO 10	Determine the tactics of managing dental patients with somatic pathology by making reasonable decisions based on existing algorithms and standard schemes.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 10, GC 12, GC 13, GC 14, GC 16; SC 1, SC 7, SC 8, SC 15.
SLO 11	Manage the treatment of major dental diseases by existing algorithms and standard schemes under the supervision of a head doctor in the conditions of a medical institution.	GC 1, GC 2, GC 3, GC 4, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 9, SC 10, SC 15.
SLO 12	Organize medical and evacuation measures among the civil and military population, in conditions of emergency, including martial law, in the course of the deployed stages of medical evacuation, according to the available medical and evacuation equipment.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 11, SC 15.
SLO 13	Determine the tactics of providing emergency medical care using recommended algorithms, under all circumstances, based on the evaluation of urgent condition (emergency diagnosis) in a limited time.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 12, SC 15.
SLO 14	Analyze and evaluate public, social and medical information using standard approaches and computer information technologies.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 8, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 13, SC 15, SC 16.
SLO 15	Assess the environmental impact on the health of the population in the conditions of a medical institution according to standard methods.	GC 1, GC 2, GC 3, GC 5, GC 6, GC 7, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 13, SC 14, SC 15, SC 16.
Learning outcomes in the emotional sphere.		
GLO 1	Set goals and determine the structure of personal activity based on the results of analysis of certain social and personal needs.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 7, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 6, SC 7, SC 8, SC 9, SC 10, SC 11, SC 12, SC 13, SC 14.

GLO 2	Maintain a healthy lifestyle, use self-regulation and self-control techniques.	GC 1, GC 2, GC 3, GC 5, GC 6, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 5, SC 14.
GLO 3	Be aware of and guided in their activities by civil rights, freedoms and duties, and raising the general cultural level.	GC 4, GC 5, GC 6, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 5, SC 13, SC 14, SC 16.
GLO4	Adhere to ethical, bioethical and deontology requirements in their professional activities.	GC 1, GC 2, GC 3, GC 4, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 7, SC 9, SC 10, SC 11, SC 12, SC 13, SC 14, SC 15, SC 16.
GLO 5	Organize the necessary level of individual safety (own and those cared for) in case of emergency in the individual sphere of activity.	GC 1, GC 2, GC 3, GC 5, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15, GC 16; SC 1, SC 5, SC 6, SC 9, SC 10, SC 11, SC 12, SC 13, SC 14, SC 15.
Learning outcomes in the psychomotor sphere.		
SLO 16	Perform medical manipulations based on a preliminary and / or final clinical diagnosis.	GC 1, GC 2, GC 3, GC 7, GC 9, GC 10, GC 11, GC 13. GC 14, GC 15; SC 9, SC 10, SC 11, SC 12.
SLO 17	Perform dental manipulations based on a preliminary and / or final clinical diagnosis.	GC 1, GC 2, GC 5, GC 6, GC 8, GC 9, GC 10, GC 11, GC 12, GC 13, GC 14, GC 15; SC 9, SC 10, SC 11, SC 12.
SLO 18	Perform emergency care manipulations using standardized procedures, under all circumstances, based on emergency diagnosis.	GC 1, GC 2, GC 3, GC 4, GC 5, GC 6, GC 8, GC 9, GC 10, GC 11, GC 13, GC 14, GC 15, GC 16; SC 9, SC 10, SC 11, SC 12.

Learning outcomes for the discipline: professional training of a doctor, which involves mastering the issues of theory and practice in therapeutic, orthopedic, surgical and pediatric dentistry; ability to carry out examination of a dental patient, to diagnose the main symptoms of inflammatory and traumatic diseases of the MFA, to justify and formulate a preliminary diagnosis; analyze the results of the examination and conduct differential diagnosis, formulate a clinical diagnosis, identify and differentuate 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 dental diseases.

2. Information volume of the discipline.

0.5 ECTS credits of 15 hours are allocated for studying of the discipline.

To explain and interpret the principles of deontology and medical ethics in dentistry and maxillo-facial surgery (MFS), the method of examination of patients with MFA pathology, the participation of related specialists in the examination.

To analyze the indications and contraindications, features of application of the basic methods of general and local anesthesia, sedation in the practice of the dentist.

To develop a plan and conduct an examination of a patient with MFA pathology. To make a plan for additional research methods and be able to interpret their results. To make plan for a comprehensive examination and treatment of AIDS patients.

To collect anamnesis and provide examination of the patient for the specified pathology of the MFA, and to fill in the relevant medical documentation; perform cardiopulmonary resuscitation.

To collect material for carrying out additional research methods (microbiological, cytological, histological); provide emergency assistance in the presence of life-threatening conditions.

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Topic 1. Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.

Organization of work and equipment of the dental clinic, maxillofacial department of the hospital, operating, dressing. Special equipment, equipment, and tools for examination of patients and performing dental interventions. Medical documentation in the surgical department (office) of the dental clinic and in the maxillofacial department of the hospital. Indicators of the work of the surgeon-dentist. Indications for hospitalization of patients with pathology of maxillofacial area, peculiarities of their examination and rehabilitation.

Peculiarities of examination of patients with diseases of the dentoalveolar 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 the doctor and the patient. Emotional factors associated with diseases, lesions, and facial defects and treatment. Deontology and medical ethics in surgical dentistry and maxillofacial surgery.

Collection of subjective data of the patient:

- Complaints at the time of the visit to a health facility.
- History of disease: the development of the disease, its changes over time, pretreatment.
- Anamnesis of life: hereditary, past and concomitant diseases, bad habits – the use of drugs, alcoholic beverages, smoking history, history of allergies.

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

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

Objective methods of research with the use of modern diagnostic equipment. X-ray: X-ray, tomography, panoramic radiography and pantomography. The use of artificial contrasts. Computed tomography and magnetic resonance imaging, radioisotope, ultrasound diagnostics, remote and contact thermography. Morphological methods: a cytological examination of prints, scissors, puncture material, histological examination of biopsy material. Methods of functional diagnostics: rheography, polarography and electromyography, electroodont diagnostics. Application of computers in diagnostics: decoding of X-rays, planning of operations, results of treatment.

The volume of examination of patients with pathology of the maxillofacial area during treatment in the conditions of the clinic and in-patient department, the participation of allied specialists in the examination.

Types of bite. Terms of the eruption of deciduous and permanent teeth.

Stages of caries, classification of pulpitis and periodontitis. Clinical manifestations, methods of treatment.

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

1. Principles of organization of dental care for the citizens of Ukraine.
2. Organization of work of the surgical department (office) of the dental polyclinic.
3. Features of organization and provision of special surgical dental care.
4. The technique of examination of the condition of the maxillofacial area of a surgical dental patient.
5. Additional methods of examination (electroodontometry, radiography, morphological, microbiological, functional studies).
6. Measures for prevention of dental diseases.
7. Caries of teeth: etiology and pathogenesis. Classification. Clinical manifestations. Principles of treatment.
8. Pulpitis of the teeth: etiology and pathogenesis. Classification. Clinical manifestations. Principles of treatment.
9. Periodontitis of teeth. Causes. Clinic, diagnosis and treatment principles.
10. Non-carious dental lesions: etiology and pathogenesis. Classification. Clinical manifestations. Principles of treatment.

Topic 2. Inflammatory diseases of the maxilla-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.

Etiology and pathogenesis of purulent inflammatory diseases of the maxillofacial area. Classification. The role of dental caries and dental damage in the development and spread of inflammation. Definition of the concept of "odontogenic infection" and contemporary ideas about its importance in the development of local general-somatic pathology.

Periostitis of jaws. Classification. Acute purulent periostitis of the jaw. Pathogenetic connection with periodontitis. Distribution of inflammatory process depending on the location of the roots of different groups of teeth. Pathological anatomy. Clinical picture. Differential diagnostics. Treatment. Indications for tooth extraction in case of acute odontogenic jaw infiltration. Chronic periostitis. Clinical picture, treatment.

Osteomyelitis of jaws. Classification. Odontogenic, contact, hematogenous. The role of microflora, nonspecific resistance, the immunological status of the patient, anatomical structure of the jaws in the development of the disease. Modern conceptions of etiology and pathogenesis of odontogenic osteomyelitis of the jaws. Clinical picture and differential diagnostics of acute odontogenic osteomyelitis. Complex pathogenetic treatment: surgical, medical therapy, application of physiotherapeutic methods. Consequences and possible complications.

Odontogenic sinusitis: classification, clinical picture, diagnosis, differential diagnosis, methods of surgical and conservative treatment. Methods of surgical interventions.

Surgical anatomy of interfascial and intermuscular cellular spaces of the head and neck. Definition of the concepts of abscess and phlegmon. Etiology and pathogenesis of the abscess and phlegmon of the maxillofacial area and neck. Ways and mechanisms for spreading the infectious process.

Classification of superficial and deep processes. General and local clinical characteristics of the abscess and phlegmons of the pharyngeal and adjacent areas. Etiological and pathogenetic principles of general and local treatment of inflammatory processes. Surgical treatment, its goals. The value of the choice and techniques of the performing of surgical approach. Anesthesia during surgical interventions in case of abscess or phlegmon of different MFA localizations.

The use of medications, immunotherapy and physiotherapy procedures. \

Osteophlegmon and adenophlegmon, superficial and deep abscess and phlegmon: comparative characteristic of etiology, pathogenesis, clinical course, treatment of complications, rehabilitation of patients.

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

1. What is osteomyelitis? What are the basic theories of its occurrence?
2. Causes and factors that cause acute odontogenic osteomyelitis.
3. Ways of distribution of odontogenic infection in jaw bones.
4. Classification of phlegmons of MFA.
5. Periostitis of jaws – clinical course, diagnostics, and treatment.
6. General characteristics of the clinical course of phlegmons and abscesses of MFA.
7. General principles of treatment of phlegmons and abscesses of MFA.
8. Inflammatory processes of lymph nodes of MFA: clinical course, diagnosis, and treatment.
9. Inflammatory diseases of the salivary glands – etiology, clinical course, diagnostics, and treatment.
10. Odontogenic sinusitis: clinical course, diagnosis, and treatment.
11. Complications of acute inflammatory processes of MFA

Topic 3. Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.

Structure and function of the periodontium. Classification, etiology, and pathogenesis of periodontitis and periodontitis. Clinical course, variants of treatment and possible complications of these diseases.

Recurrent aphthous stomatitis. Clinical manifestations, etiological factors, principles of treatment of patients with somatic pathology. Acute herpetic stomatitis. The main symptoms in children and adults, methods of differential diagnosis. Principles of medical treatment. Manifestations of diseases of the gastrointestinal tract, blood system, cardiovascular and endocrine system in the oral cavity.

Classification of tumors of the maxillofacial area. Statistics on the distribution of tumors of the MFA. The role and tasks of the dentists and doctors of general practice in the system of providing specialized assistance to patients with tumors of the maxillofacial area. The examination of patients for the purpose of diagnosis of tumors, the role of modern methods of examination (X-ray, radioisotope diagnosis, cytological and histological verification of tumors). Stages by the TNM system. Clinical groups of cancer patients.

Tumor-like diseases. Cyst as a consequence of developmental defects: odontogenic (primary cyst – keratocyst, cyst eruption, follicular); non-odontogenic (cysts of the nasopharyngeal (incisor) canal, globulomaxillary, aneurysmal and solitary). Odontogenic cysts of inflammatory nature are radicular. Clinical

manifestations, diagnosis, mechanism of growth, pathological anatomy, methods of surgical treatment: cystotomy, cystectomy, two-stage method, plastic cystectomy, oronasal cystectomy.

Odontogenic tumors. Classification: benign – ameloblastoma (adamantinoma), ameloblastic fibroma (soft odontoma), complex odontoma, fibroma (odontogenic), myxoma and cementum – benign cementoblastoma (true cementoma), cementing fibroma. Precancerous diseases of the skin of the face, red border of lips, oral mucous membrane. Classification. Optional, obligatory forms. Background Diseases. Clinical manifestations, diagnostic methods, treatment.

Tumors of the facial skin. Epithelial tumors, tumor-like processes, and cysts, the growth source of which is the epidermis of the skin. Tumor-like processes: keratocyst, keratolytic papilloma (skin horn), and others. Cysts of the epidermis – atheroma. Tumor-like process in the sebaceous glands – rhinophyma. Melanogenic system tumors: benign – nevus, malignant – melanoma. Clinical picture, features of diagnostics, treatment. Epithelial tumors and tumor-like lesions of the organs of the oral cavity and jaws. Benign – squamous papilloma. Malignant – intraepithelial and squamous cell carcinoma, lymphoepithelioma, basal and squamous cell carcinoma.

Clinical picture, diagnosis, treatment depending on the stage of an injury (surgical, radiation, cryogenic, laser, combined effect). Cancer of the lips. Cancer of the oral cavity (tongue, cheek, bottom of the oral cavity, hard and soft palate). Cancer of the upper and lower jaws. Clinical picture, diagnostics, principles of treatment (radiation, surgical, cryogenic, laser, chemotherapy, medication, immunotherapy, combined effect).

Indications and contraindications to surgical intervention at the primary stage and on the paths of regional metastasis. Features of anesthesia and postoperative management of patients. Indications for intensive care. Prognosis and recovery criteria. Sarcoma of soft tissues and bones of the maxillofacial area. Clinical picture, diagnostics, treatment.

Tumors, cysts, and tumor-like lesions of the salivary glands. Retinal cyst of minor salivary glands. Cyst of major salivary glands. Ranula: clinical picture, differential diagnosis, histological structure. Methods of treatment. Epithelial tumors: adenoma – polymorphic (mixed tumor), monomorphic (adenolymphoma, etc.); mucoepidermoid; cylinder, adenocellular tumor.

Differential diagnosis of benign and malignant tumors of the salivary glands. Carcinoma: adenocystoma (cylindroma), adenocarcinoma, epidermoid carcinoma, carcinoma in polymorphic adenomas. Treatment of nosological forms of tumors, taking into account localization in major and minor salivary glands. Surgical methods of treatment and indications for them.

Tumors of soft tissues. Tumor-like lesions of fibrous tissue: gum fibromatosis, radiation keloid, keloid, peripheral giant cellular granuloma (giant cellular epulis), fibromatous and angiomatous epulis. Tumors and tumor-like lesions of adipose tissue: benign – lipoma, diffuse lipomatosis; malignant – liposarcoma. Tumors of fibrous tissue: benign – fibroma; malignant – fibrosarcoma. Tumors of muscle tissue: benign – myoma, leiomyoma, rhabdomyoma; malignant – leiomyosarcoma, rhabdomyosarcoma. Tumors and tumor-like lesions of the blood vessels: benign – hemangioma (capillary, cervical); Malignant - angiosarcoma. Tumors and tumor-like lesions of the lymphatic vessels: benign: lymphangioma – capillary, cervical, (cystic hygroma); malignant: lymphangioendothelioma (lymphosarcoma); tumorous – systemic lymphangiomatosis. Tumors and tumor-like lesions of the peripheral nerves of the face: benign – neurinoma (lemmoblastoma), neurofibroma; malignant neurogenic sarcoma; tumor-like lesions: neurofibromatosis (Recklinghausen's disease), traumatic neurology. Tumors and tumor-like lesions of the embryonic origin: teratoma (dermoid cyst). Congenital cysts and fistulas derive from embryogenesis. Lateral (branchiogenic), median (thyroid gland) cyst. Bronchogenic cancer. Clinical picture, diagnosis, treatment.

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

1. Describe the clinical manifestations of recurrent aphthous stomatitis, herpetic stomatitis. The scheme of treatment of these diseases.
2. What are the manifestations in the oral cavity of acute leukemia?
3. What is periodontitis?

What are the clinical manifestations of generalized periodontitis?

4. What are the stages of treatment of different degrees of periodontitis?
5. What is obligate precancerous disease?
6. What is optional precancerous disease?
7. Describe the clinical course and treatment of warts.
8. Describe the clinical course and treatment of decubital ulcer.
9. Describe the clinical course and treatment of Manganotti cheilitis.
10. What are the clinical manifestations of oral gastrointestinal diseases?

Topic 4. Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.

Causes of injury, its prevention, statistics of damages of maxillofacial area in peaceful and military time, their classification. General characteristics and features of facial injuries. Traumatic diseases: pathogenesis, clinical picture, treatment principles, complications. Basic organizational principles of care of an injured person with damage to soft tissues and bones of the face. First premedical, first medical, qualified. and specialized treatment.

Causes and mechanism of non-fatal injury of the person, its features. Methods of examination of injured patients. General immediate complications, damage to the jawbone area. (shock, asphyxia, bleeding, etc.). Classification, clinical picture, treatment.

Fractures of the bones of the facial skull: lower and upper jaw, zygomatic bones, nasal bones, adjoining bones. Frequency, causes, localization, and character of bone fractures depending on the causes and mechanism of injury. Types and typical locations of fractures. Biomechanics of fractures, mechanism and the nature of the displacement of fragments. Clinical examination, manifestations of fractures of the facial bones: anatomic and functional disorders, bite changes, etc. The prognosis for the teeth located in the fracture lines. Indications for extraction of such teeth. Intraarticular fractures, fractures with dislocation of the condylar head.

Principles of treatment of fractures of the bones of the facial skull – repositioning and fixation of fragments, jaw immobilization, medication and physiotherapy, orthopedic and functional treatment, complications, their prevention.

Treatment of mandibular fractures. Provision of first medical aid. Ways of repositioning of the fragments. Biomechanical bases of fixation of the fragments. Temporary (transport) immobilization of the jaw, indications, means. Treatment immobilization. Application of individual and standard arch bars and splints. Osteosynthesis of the mandible: indications and contraindications, osteosynthesis with bone sutures; application of metal wires, plates and frames, miniplates with screws. Compression osteosynthesis of the mandible.

Treatment of fractures of the maxilla, middle face area. Temporary and transport immobilization of the maxilla. Ways of repositioning and fixing fragments of the maxilla. Osteosynthesis and compression osteosynthesis. Terms of healing, consequences.

Fractures of zygomatic bones and arch, zygomatic complex. Classification, diagnosis, clinical picture. Features of treatment. Conservative, surgical methods of repositioning and fixing of the fragments. Traumatic sinusitis. Restoration of the bottom of the orbit. Fractures of the bones and damage to the cartilage of the nose. Diagnostics, clinical picture, treatment. Front and back tamponade of the nasal passages.

Combined injuries of the maxillofacial area. Cranio-maxillofacial trauma. Fractures of the bones of the skull base. Diagnosis, treatment. Features of providing medical care in a combination of facial damage with concussion of brain, liquorrhea, damage to other organs. The role of neurosurgeons, intensive care specialists, and ophthalmologists.

Thermal damage to the face. Classification. Features, causes, severity, and depth of damage, possible complications. Treatment of face burns. Burns caused by Napalm. Electric trauma. Cold trauma, frostbite. Clinical picture, treatment. Chemical damage: acids, alkalis, military poisonous substances. Damage of facial tissues as a result of penetrating radiation and radioactive contamination. Clinical course, diagnostics, treatment of these injuries.

Combined radiation damage to the face. Features of the course of the wound process depending on the stage of the radiation sickness. Syndrome of mutual aggravation. The term and features of surgical treatment of wounds and features of the treatment of fractures and defects of jaws in combined injuries. Combined chemical, bacteriological and mechanical lesions of the maxillofacial area: clinical course, treatment at the stages of medical evacuation, features of wound treatment, hemostasis, wound healing.

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

1. Characteristic features of traumatic injuries of MFA.
2. Classification of traumatic injuries of MFA.
3. Clinical features of wounds of soft MFA tissues. Primary surgical treatment of MFA wounds. Stages of conduction.
4. Local complications of wounds of soft MFA tissues.
5. First aid for injured people. First premedical, first medical, qualified and specialized treatment.
6. Classification, clinical picture, treatment of fractures of the jaws, zygomatic bones, and arch. Clinical examination, manifestations, types, typical fracture sites. Biomechanics of fractures, mechanism of the displacement of fragments.
7. Dislocations of the lower jaw.
8. Facial burns – classification, clinical picture, diagnosis, treatment.
9. Frostbite of the face – features of clinical manifestations, diagnostics, treatment.
10. Traumatic diseases: pathogenesis, clinical picture, principles of treatment, complications. Complications of damage to the maxillofacial area (shock, asphyxia, bleeding, etc.).
11. Nutrition and care for patients with MFA trauma.

List of questions for final control from the discipline "Fundamentals of Dentistry"

1. Dentistry as a medical specialty. Organization of dental care in an outpatient clinic in Ukraine.
2. Development of the tooth-jaw system: temporary and permanent teeth, teething, root and periodontal formation, physiology of the tooth-jaw system. Relationship between the state of the dental-jaw system and the general state of human health
3. Examination of the dental, maxillofacial patient.
4. Caries of teeth: etiology and pathogenesis, classification. Clinical manifestations. Principles of treatment.
5. Pulpitis of the teeth: etiology and pathogenesis, classification. Clinical manifestations. Principles of treatment.
6. Non-carious lesions of the teeth: etiology, pathogenesis, classification. Congenital malformations of the hard tissues of the teeth. Clinical manifestations. Principles of treatment. enamel hypoplasia, wedge defects, increased enamel abrasion, chemical necrosis of enamel and dentin, enamel hyperesthesia.
7. Measures for prevention of dental diseases (state, social, medical, and hygienic, educational).
8. Pain, its types, components and values for the body.
9. Organization and provision of anesthesiology and resuscitation service in the dental clinic and hospital.
10. General anesthesia in dentistry and maxillofacial surgery. Types of anesthesia. Indications for use.
11. Examination of the patient and general preparation for anesthesia. Stages of anesthesia.
12. Non-inhalation and inhalation methods of anesthesia. Features of intubation anesthesia in patients with maxillofacial pathology. Mask and nasopharyngeal anesthesia.
13. Classification of local methods of anesthesia in dentistry and maxillofacial surgery (non-injection and injection methods). Impressions and contraindications to use. Local complications are possible.
14. Local anesthetics, their clinical and pharmacological characteristics. Ways of prolonging the action.
15. Premedication: types, indications for use. Groups of pharmacological preparations used for premedication (analgesics, tranquilizers, antihistamines, etc.) and their clinical and pharmacological characteristics.
16. General complications of local anesthesia: reactions from the cardiovascular system and the CNS (fatigue, collapse, anaphylactic shock, other allergic reactions). Emergency assistance.
17. Emergency conditions and principles of resuscitation in dental practice (respiratory complications, cardiovascular, coma, shock manifestations, etc.). Principles of cardiopulmonary resuscitation. Prevention of life thereatening conditions.
18. Classification of inflammatory processes of MFA. Frequency of occurrence.
19. Periostitis, osteomyelitis of the jaws. Etiology, pathogenesis, clinic, diagnosis, treatment.
20. Odontogenic abscesses. Superficial and deep phlegmons of odontogenic and non-odontogenic origin.
21. Lymphadenitis of the MFA. Etiology, pathogenesis, clinic, diagnosis, treatment.
22. Odontogenic sinusitis. Etiology, pathogenesis, clinic, diagnosis, treatment.
23. Sialoadenitis. Etiology, pathogenesis, clinic, diagnosis, treatment.
24. Specific inflammatory processes of MFA. Clinical manifestations of tuberculosis, syphilis on the face and in the mouth. Modern methods of diagnosis and treatment. Noma of the face.
25. Complications of acute inflammatory processes in the maxillofacial area (purulent thrombophlebitis, thrombosis of the cavernous sinus, meningitis, encephalitis, mediastenitis, sepsis, infectious-toxic shock). Their etiology, pathogenesis, clinical picture, modern methods of diagnosis, treatment.
26. Chronic stomatogenic and odontogenic infection. Modern ideas about its importance in the development of diseases of organs and systems of the body. Stomatogenic chroniosepsis and others.
27. Etiology and pathogenesis of parodontal diseases.
28. Classification of parodontal diseases.
29. Gingivitis. Etiology and pathogenesis, clinical manifestations, principles of treatment.
30. Parodontitis. Etiology and pathogenesis, clinical manifestations, principles of treatment.
31. Parodontosis. Etiology and pathogenesis, clinical manifestations, principles of treatment.
32. General characteristics of idiopathic periodontal diseases.
33. Etiology and pathogenesis of diseases of oral mucosa.
34. Classification of diseases of oral mucosa.

35. Acute herpetic and ulcerative necrotic stomatitis. Etiology and pathogenesis, clinical manifestations, principles of treatment.
36. Chronic recurrent aphthous stomatitis. Etiology and pathogenesis, clinical manifestations, principles of treatment.
37. Traumatic injuries of oral mucosa. Manifestations of radiation sickness.
38. Manifestations of infectious diseases in adults and children. The main symptoms.
39. Changes of oral mucosa caused by diseases of digestive, cardiovascular, endocrine and hematopoietic systems. The main symptoms.
40. Tuberculosis, syphilis and HIV infection. Their manifestations in the oral cavity, diagnosis, pathways and prevention of infection.
41. Doctor's tactics in detecting changes in oral mucosa. Differential diagnosis of oral mucosa ulcers.
42. Relationship of periodontal lesions, oral mucosa and general condition of the body.
43. Prevention of diseases of oral mucosa and periodontal tissues.
44. Classification of tumors of maxillofacial area. Theories of carcinogenesis.
45. Examination of patients for the purpose of tumor diagnosis, the role of modern methods of examination (radiological, radioisotope diagnostics, cytological and histological verification of tumors). Stages of defeat by the TNM system.
46. Tumor formations of the thyroid gland (jaw cysts). Etiology, pathogenesis. Clinic, diagnosis, treatment.
47. Organ-specific benign tumors (odontoma, ameloblastoma, cementoma, epulis): clinic, diagnosis, treatment.
48. Organ-specific benign tumors of thyroid (angioma, osteoma, osteoblastoclastoma, fibroma, papilloma): clinic, treatment.
49. Precancerous diseases of the skin, red border of the lips, mucous membrane of the oral cavity. Background diseases. Clinical manifestations, methods of diagnostics, treatment.
50. Malignant tumors of the soft tissues of the maxillofacial area. Lip and tongue cancer - Clinic, diagnosis and treatment.
51. Malignant tumors of the salivary glands.
52. Malignant tumors of the lower and upper jaws.
53. Metastases of malignant tumors on the neck. Basic methods of treatment of malignant tumors of maxillofacial area.
54. Characteristic features of traumatic injuries of MFA.
55. Classification of traumatic injuries of MFA.
56. Clinical features of soft tissue wounds of MFA. Primary surgical treatment of the MFA wounds. Stages of conducting.
57. Local complications in soft tissue wounds of MFA.
58. First aid for trauma to the facial bones. Pre-medical, first medical, qualified and specialized care.
59. Classification, clinic, treatment of fractures of jaws, zygomatic bone and arch. Fractures of the facial skull (clinical examination, manifestations, types, typical fracture sites). Biomechanics of fractures, mechanism and nature of displacement of fragments.
60. Dislocations of the mandible.
61. Facial burns - classification, clinic, diagnosis, treatment.
62. Facial frostbite - features of clinical manifestations, diagnosis, treatment.
63. Traumatic disease: pathogenesis, clinic, treatment principles, complications. Complications of injuries in the maxillofacial area (shock, asphyxia, bleeding, etc.).
64. Nutrition and care for patients with traumatic injuries of MFA.
65. Congenital cleft of the palate. Etiology, pathogenesis, classification, clinic, terms and basic principles of treatment. Features of care and nutrition of children with the specified pathology in the pre- and postoperative period.
66. Congenital cleft palate and soft palate. Etiology, pathogenesis, classification, clinic, terms and basic principles of treatment. Features of care and nutrition of children with the specified pathology in the pre- and postoperative period.
67. Macro- and micrognathia. Etiology, pathogenesis, classification, clinic, basic principles of treatment.

68. Macro- and microgeny. Etiology, pathogenesis, classification, clinic, basic principles of treatment.
69. Bite abnormalities in children. Classification. Orthodontic devices, classification of apparatus, terms of treatment. Prevention.

3. Structure of the educational discipline

Topic	Lectures	Practical lessons	Independent work	Individual tasks
Topic 1. Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.	-	2	1,5	-
Topic 2. Inflammatory diseases of the maxilla-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.	-	2	1,5	
Topic 3. Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.	-	2	2	
Topic 4. Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications. **Summary lesson.**	-	2	2	
Total hours 15/0,5 credits ECTS	**-**	**8**	**7**	
Final control				Credit

5. Practical lessons schedule

№	Title of the topic	Hours
1.	**Topic 1**. Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.	*2*
2.	**Topic 2.** Inflammatory diseases of the maxilla-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.	*2*
3.	**Topic 3.** Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.	*2*
4.	**Topic 4.** Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications. **Summary lesson.**	*2*
Total hours: *8*		

6. Independent work schcedule

№	Topic	Hours	Control
1	Anaesthesia in dentistry. Local, general, potentiated. General complications of local anesthesia, clinical features and urgent care.	1,5	Current control on the practical classes
2	Manifestations of specific inflammatory diseases (tuberculosis, syphilis, actinomycosis) and HIV/AIDS in the oral cavity. Reliable and unreliable signs of AIDS.	1,5	Current control on the practical classes
3	Benign and malignant tumors of the maxilla-facial area.	2	Current control on the practical classes
4	Factors that influence the occurrence of congenital malformations of the teeth and face. Types and clinical picture of congenital malformations. Types of surgical interventions, terms of plastic closure of defects. The role of orthodontist and speech therapist in postoperative rehabilitation of patients. Features of medical management of pediatric patients.	2	Current control on the practical classes
Total hours: 7			

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

8. Teaching methods.

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

- Law of Ukraine "On Higher Education" of 01.07.2014 №1556-VII;
- Decree of the Cabinet of Ministers of Ukraine dated 29.04.2015 №266 "On approval of the list of branches of knowledge and specialties under which the training for higher education is carried out";
- the Order of the Ministry of Education and Science of Ukraine No. 1151 dated 06.01. 2015 "On the peculiarities of introduction of a list of branches of knowledge and specialties, under which the training for higher education is carried out; approved by the Resolution of the Cabinet of Ministers of Ukraine dated 29.04. 2015 №266";
- the Order of the Ministry of Education and Science of Ukraine No. 47 dated 26.01.2015, "On the peculiarities of the formation of curricula", registered with the Ministry of Justice of Ukraine on 04.02. 2015, No. 132/26577;
- Letter of the Ministry of Health of Ukraine dated 25.07. 2016 No. 08.01- 30/19087;
- Order of the rector of the LNMU named after Danylo Halytsky dated 02.06.2016 № 1604 "On approval of curricula";
- the provision on the organization of the educational process at the Lviv National Medical University named after Danylo Halytsky, approved by the Academic Council of the Danylo Halytsky LNMU on 18.02. 2015, Minutes No. 1-VR;
- the curriculum of the discipline "surgical dentistry" for students of the III, IV and V years of the dental faculty.

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

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

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

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

rehabilitation.

Methodology of educational process in practical lesson on surgical dentistry:

1. Preparatory stage, 15 min.

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

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

2. The main stage, 60 min.

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

3. Final stage, 20 min.

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

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

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

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

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

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

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

Innovative methods and technologies used in the educational process

Discipline	Edicational technologies and innovative teaching methods
Surgical dentistry	- involvement of students into work with well-known medical databases (ScienceDirect, PubMed, Panteleimon, etc.); -interdisciplinary approach to the study of surgical dentistry - a constant emphasis on the interconnections between basic medical disciplines and related dental specialties; - Involvement of students in assisting with surgical interventions, online video broadcasting of surgical procedures with the simultaneous discussions and comments of the manipulations; - regular hospital rounds with students, examination of thematic patients and discussion of clinical cases, motivation of students to compile algorithms of diagnostic and treatment measures for different dental surgical pathology.

9. Control methods.

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

Control methods and assessment system are developed in accordance with the requirements of "Criteria, rules and procedures for evaluating the results of students' educational activities at the Danylo Halytsky LNMU, approved by the Academic Council of LNMU of 02/21/2018, protocol No. 1.

Control measures in the study of "Surgical dentistry" include current control and final control, which is called a semester test.

Before studying a new course, students have to take 'entrance control' test in order to determine the level of preparation of students to the discipline (based on the fundamentals of previous studies). Entrance control is carried out on the first lesson and is based on the assignments corresponding to the program of relevant discipline studied before. The results of the entrance control are analyzed at the department (chair) meetings and also involve the representatives of methodology committee as well as the teachers of the relevant discipline. According to the results of the entrance control test, students may be provided with individual assistance or with some measures of adjusting the educational process.

Current control is carried out on every practical lesson according to the specific goals of each topic. It is based on the comprehensive evaluation of the student's activity, which takes into account the entrance control test, the quality of practical work, the level of theoretical training, the level of performance in individual assignments according to the thematic plan and the results of the final control.

In the course of assessing the educational activity of students, the preference is given to standardized methods of control: test tasks, situational tasks, control questions, oral questioning, structured written work, structured control of practical skills in conditions that are close to real ones (algorithm -based).

Final control, which is a semester credit, is a form of summarizing control, which assesses the level of student solely on the basis of the results of certain types of work in practical classes. It is conducted in accordance with the curriculum in terms set by the schedule of the educational process and in the amount of educational material determined by the program of academic discipline.

Assessment procedure for the discipline of "Surgical Dentistry", presented by the two content modules, is rating-based and is made up of the sum of evaluation points of the current educational activity, which can be gained for theoretical knowledge and practical skills in accordance with the lists determined by the discipline program.

10. Current control is carried out during the training sessions and aims at checking students' acquisition of the material, the level of theoretical and practical training. Current control can be presented in the form of testing, solving situational problems, solving clinical situational problem, demonstration of practical skills or abilities, answers to standardized theoretical questions. Forms of assessment of the current educational activity are standardized and correspond to the standards of answers.

10.1. *Assessment of current educational activity.* Evaluation of current student's progress made on each practical lessons on the 4- point scale and recorded in the register of academic success.

Knowledge of students are evaluated both theoretical and practical training by the following criteria:

"Perfect" – the student perfectly mastered theoretical material, shows the deep and comprehensive knowledge of the relevant subject or discipline, the basic provision of the basic textbook and recommended literature, have the logical thinking and make the answer, freely use the acquired theoretical knowledge in the analysis of practical material, expresses his attitude to various problems, demonstrates the high level of practical skills;

"Good" – the student learned theoretical material good, has the main aspects of the basic textbook and recommended literature, the knowledge set reasonable; has the practical skills, expressed own views of the problem, but assume certain inaccuracies in the logic of the theoretical contents presentation or by the analysis of the practical contents;

"Satisfactory" – the student basically mastered the theoretical knowledge of the subject or discipline, oriented in the basic textbook and recommended literature, but unconvincingly answer, confuses the notions, additional questions arouse the student uncertainty or absence of stable knowledge, answering the practical questions reveals inaccuracies in knowledge, can not estimate the facts and events, link them to the future activities;

"Unsatisfactory" - the student has not mastered the subject (discipline) course material, does not know the scientific facts, definitions, hardly versed in the basic textbook and recommended literature, the scientific thinking is absent, practical skills are not formed.

Evaluation of self-made student work

Material for independent work of students, which is provided simultaneously with the practical classes and estimated during the current control of the theme on the appropriate practical classes. Self-made themes are evaluated and controled during the final control.

The final control - semester credit is performed to assess learning outcomes on a national scale and ECTS scale.

The students, who attended all the stipulated discipline curriculum classes and scored for current progress score not less than the minimum are allowed to the final control. For students, who missed classes, with the dean permission is permitted to fulfill academic debt to the fixed period within the term.

11. The semester credit is the form of final control, which is consist in the evaluation assess of the educational material mastering exclusively on the basis of the certain types of work realization at the practical classes.

The semester test performed at the end before the examinations. Credits accept teachers, who conducted practical classes in the group or hold lectures in the discipline.

A student is considered to be admitted to semester control if all kinds of work provided the curriculum and the work program have been made.

The results of students work evaluation during the semester should be documented (included in the academic journal, credit - examination sheet, student Gradebook). Performed by students during the semester control tests, individual tasks are kept at the department during the year.

12. In the educational process of University, the following grading scales are used: multimark (200 - point) scale, the traditional 4- point scale and ECST rating scale. The results are converted from one scale to another according to the following rules.

In evaluating the mastering of each theme for current educational student activity the score by the 4-point scale (traditional) are set. This takes into account all types of work, provided the curriculum. The student must obtain an assessment of each theme. The assessment's forms of current educational activity should include control of theoretical and practical training. Marks of traditional assessment scale are converted into the points.

The maximum number of points that a student can collect for current educational activity at the subjects study is 200 points.

The minimum number of points that a student must collect for current educational activity for enrollment courses is 120 points.

Calculating the number of points is based on student evaluations received by traditional scale while learning subjects during the semester, by calculating the arithmetic mean rounded to two decimal places. The result value is converted into points by multi- scale as follows:

$$x = \frac{CA \times 200}{5}$$

For convenience, a table converting 200 -point scale:

Table 1

Conversion of the average score for current activity in multimark scale for disciplines ending as a credit (differentiated credit)

4-points scale	200-points scale
5	200
4.97	199
4.95	198
4.92	197
4.9	196
4.87	195
4.85	194
4.82	193
4.8	192
4.77	191
4.75	190
4.72	189
4.7	188
4.67	187
4.65	186
4.62	185
4.6	184
4.57	183
4.52	181
4.5	180
4.47	179

4-points scale	200-points scale
4.45	178
4.42	177
4.4	176
4.37	175
4.35	174
4.32	173
4.3	172
4.27	171
4.24	170
4.22	169
4.19	168
4.17	167
4.14	166
4.12	165
4.09	164
4.07	163
4.04	162
4.02	161
3.99	160
3.97	159
3.94	158

4-points scale	200-points scale
3.92	157
3.89	156
3.87	155
3.84	154
3.82	153
3.79	152
3.77	151
3.74	150
3.72	149
3.7	148
3.67	147
3.65	146
3.62	145
3.57	143
3.55	142
3.52	141
3.5	140
3.47	139
3.45	138
3.42	137
3.4	136

4-points scale	200-points scale
3.37	135
3.35	134
3.32	133
3.3	132
3.27	131
3.25	130
3.22	129
3.2	128
3.17	127
3.15	126
3.12	125
3.1	124
3.07	123
3.02	121
3	120
Less then 3	Not enough

Evaluation of the disciplines (subjects) which the final control is the **test** is based solely on the results of current training and expressed by two points national scale: "Passed" or "Not passed". To enroll the student must receive for current training activities at least 60 % of the maximum amount of points in the discipline (120 points). Scores are ranked on a scale of discipline ECTS (Table 3) for the above scheme.

Grade F (unsatisfactory with required repeated course) put at the test or differential credit to students who attended all subject (discipline) classes, but did not reach the minimum number of points for current educational activity. These students are not obtained credit and are not allowed to pass examinations.

Scores of discipline for students, who successfully completed the program, converted into traditional 4-point scale by absolute criteria, which are listed in the table below:

Table 2

Discipline scores	**4 – point scale**
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimal points number, which the student must score	3
Less then the minimal points number, which the student must score	2

Evaluation of ECTS to the traditional scale is not converted because the scale of ECTS and 4-point scale are independent.

Objectivity evaluation of educational activities of students tested statistically (correlation coefficient between ECTS assessment and evaluation on of national scale).

Scores of students enrolled in one specialty, given the number of points gained in the discipline ranked on a scale ECTS as follows:

Table 3

Evaluation of ECTS	Statistical index
A	The best 10 % students

B	The next 25 % students
C	The next 30 % students
D	The next 25 % students
E	The last 10 % students

Ranking of assigning ratings of "A", "B", "C", "D", "E" held for the students of the course, who are studying for one specialty and successfully completed the study subjects. Students, who received estimates FX, F («2») are not made to the list of students who ranked. Students with an estimate after repassing FX get automatically mark "E".

13. Methodological support: abstracts, expanded plans and multimedia presentations of lectures, practical classes, independent work, lists of questions, tasks and cases for current, final and self-control of students' knowledge and skills, lists and algorithms for practical skills.

List of practical skills of the discipline "Fundamentals of Dentistry":

1. Be able to collect complaints, medical and life history.
2. Be able to conduct an objective examination of a dental patient: external examination, examination of the maxillofacial area and oral cavity.
3. Be able to examine the condition of the maxillofacial area, hard teeth, periodontum, oral mucosa (examination, sounding, percussion, palpation).
4. Be able to assign (if necessary) additional methods of examination.
5. Be able to identify the need for the advice of a pediatrician or other narrow specialists.
6. Be able to evaluate the status of oral hygiene.
7. Be able to assess the condition of hard tissue of the teeth.
8. Be able to evaluate the bite (orthognathic or pathological).
9. Be able to make a plan for the treatment of dental caries (including multiple).
10. Be able to provide guidance on the choice of individual oral hygiene, depending on the dental status.
11. Be able to draw up an emergency plan for major dental diseases.
12. Mastering the skills of diagnosis of emergency conditions in dentistry.
13. Mastering the skills of providing emergency aid in life thereatening conditions.
14. Conduct surveys and examinations of patients with inflammatory diseases.
15. Mastering the skills of providing medical care to patients with inflammatory diseases of the MFA.
16. Mastering the skills of interpretation of data form radiography, CT, and MRI of the MFA in case of inflammatory diseases.
17. Mastering the skills of interpretation of indicators of biochemical analysis of blood in inflammatory diseases of MFA.
18. Mastering the skills of interpretation of indicators of the function of external respiration in inflammatory diseases of the MFA.
19. Mastering the skills of analyzing indicators of laboratory tests (total blood count, total protein and protein fractions, coagulogram) in inflammatory diseases of the MFA.
20. Mastering the skills of providing medical assistance for asphyxia due to MFA diseases.
21. Be able to assess the condition of periodontal tissues.
22. Be able to assess the condition of the oral mucosa.
23. Be able to draw up a plan for the treatment and prevention of periodontal tissue diseases (gingivitis, periodontitis).
24. Be able to conduct examination of patients with tumors of MFA.
25. Mastering the skills of providing care to patients with tumors of the MFA.
26. Mastering the skills of interpretation of radiographs, CT scans, MRI of the skull.
27. Mastering the skills of interpretation of indicators of biochemical analysis of blood in tumors in case of tumors of the MFA.
28. Mastering the skills of interpretation of indicators of the function of external respiration in case of tumors of the MFA.
29. Mastering the skills of analyzing indicators of laboratory tests (total blood count, total protein and protein fractions, coagulogram) respiration in case of tumors of the MFA.
30. Conduct surveys and examinations of patients with traumatic injuries of MFA.
31. Mastering the skills of providing medical care to patients with traumatic injuries of MFA.
32. Mastering the skills of interpretation of data form radiography, CT, and MRI of the MFA in case of traumatic injuries of MFA.
33. Mastering the skills of interpreting the results of biochemical blood in case of traumatic injuries of MFA.

34. Mastering the skills of interpretation of indicators of the function of external respiration in case of traumatic injuries of MFA.
35. Mastering the skills of analyzing laboratory tests (total blood count, total protein and protein fractions, coagulogram) in case of traumatic injuries of MFA.
36. Mastering the skills of providing medical care for external bleeding from the tissues of the maxillofacial area.
37. Be able to conduct an objective examination of a dental patient: general condition, examination of the maxillofacial area and oral cavity.
38. Be able to assign (if necessary) additional methods of examination.
39. Be able to identify the need for the advice of a pediatrician or other narrow specialist.
40. Be able to evaluate the occlusion (orthognathic or pathological).

The list of questions for self-control in the discipline "Fundamentals of Dentistry":

Dental diseases in childhood

1. Pediatric dentistry, its main sections.
2. The main stages of development of temporary teeth. Factors affecting the development and formation of the temporary teeth in the antenatal and postnatal periods.
3. The main stages of development of the permanent teeth. Factors affecting the development and formation of permanent teeth in antenatal and postnatal periods.
4. Eruption of temporary teeth. Physiological signs of eruption of primary teeth, causes of violations.
5. The timing of eruption of permanent teeth, formation of root and periodontal tissues.
6. Congenital malformations of the teeth, non-carious lesions of teeth, the edentulous. Reasons of development, the main clinical symptoms, principles of treatment.
7. Methods of examination of children with dental pathology. Basic and additional methods of examination.
8. Caries of temporary teeth in children: causes of development, clinical signs, principles of treatment. Prevention of caries of temporary teeth.
9. Caries of permanent teeth in children: causes of development, clinical signs, principles of treatment. Prevention of caries in permanent teeth.
10. Diseases of periodontal tissues in children: gingivitis, periodontitis, periodontal syndrome. Reasons of development, clinical manifestations, principles of treatment and prevention.
11. Manifestations in the oral cavity infectious and somatic diseases in children.
12. Primary prevention of dental diseases. The concept of endogenous and exogenous prevention. The means used for the prevention of dental caries and diseases of periodontal tissues.
13. The oral hygiene as the basis for dental diseases prevention. Characteristics of modern facilities for hygienic care of the oral cavity.

Odontopathology. Periodontal disease and the mucous membranes of the oral cavity

1. Therapeutic dentistry, its main sections, goals and objectives.
2. Methods of examination of patient in clinic of therapeutic dentistry (basic and auxiliary). 3. Non-carious lesions of teeth. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment and prevention.
4. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment and prevention of dental caries.
5. Periodontal disease. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment and prevention.
6. Diseases of the mucous membranes of the oral cavity. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment and prevention.

Diseases of maxillofacial area

1. Organization of surgical dental care to the sitizens of Ukraine in polyclinics and hospitals. 2. Examination of the patient in the surgical Department of dental polyclinic and hospital. Medical documentation.
3. Types of local anesthesia in dentistry. Indications and contraindications. The methods of execution. Mistakes and complications.
4. Chronic odontogenic inflammatory processes in patients with somatic local and systemic pathology. Tactics.
5. Etiology, pathogenesis and classification of inflammatory processes in maxillofacial area. 6. The path of spreading of odontogenic infection and its complications. Abscesses, phlegmons of the maxillofacial area: diagnosis, clinical features, principles of complex treatment.
7. Lymphadenitis of maxillofacial area: classification, clinic, diagnostics, treatment.
8. Benign tumors and tumor-like formations of maxillofacial area.
9. Malignant tumors of soft tissues and bones of the maxillofacial region: diagnosis, clinical features, principles of treatment.
10. Traumatic disease due to the damage of the maxillofacial area: classification, pathogenesis, prognosis, course, characteristics, treatment. Classification, peculiarities of damage oftissues of maxillofacial area. Temporary (transport) immobilization at damages of bones of maxillo-facial area. Complications.

11. Asphyxia, bleeding from the damaged tissues of maxillofacial area: classification, clinical features. The provision of care to patients.
12. Damage of the tongue, botton of the oral cavity: clinical features and treatment.
13. Congenital nonunion of the upper lip and palate. The role of pediatricians in treatment. Defects, deformations.

BASIC AND ADDITIONAL LITERATURE

Basic:

1. Bases of Dentistry: Textbook, / ed. by V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2012. – 616p.
2. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
3. Principles of Dental Local Anaesthesia and Teeth Removal / Ya. E. Vares, R. Z. Ogonovsky, Ch. R. Pohranychna – LNMU, 2007. – 63p.
4. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.

Additional:

1. Contemporary Oral and Maxillofacial Surgery / L. J. Peterson, E. Ellis, J. R. Hupp, M.R. Tucker – 3rd ed. – St. Louis: Mosby – Year Book, Inc. – 1998. – P. 69-82.