

MINISTRY OF HEALTHCARE OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Therapeutic Dentistry  
Educational year 2021-2022

**EDUCATIONAL DISCIPLINE SYLLABUS**

« THERAPEUTIC DENTISTRY»  
(name of the academic discipline)

Normative or elective educational component \_\_\_\_\_ normative \_\_\_\_\_

Format of educational component \_\_\_\_\_ internal \_\_\_\_\_  
(internal; hybrid; distant)

Field of knowledge \_\_\_\_\_ 22 "Health care" \_\_\_\_\_  
(code and name of the field of knowledge)

Specialty \_\_\_\_\_ 221 "Dentistry" - the second master's level \_\_\_\_\_  
(code and name of specialty)

Specialization (by availability) \_\_\_\_\_

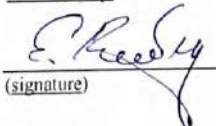
Educational and professional program "Dentistry" second (master's) level of higher education

Course 5<sup>th</sup>

The syllabus of the discipline was approved at the Department of Therapeutic Dentistry meeting

Protocol from  
"30<sup>th</sup>" of August 2021 № 22

Acting Head of the Department of Therapeutic Dentistry

  
(signature)

prof. Y.M. Ryabokon  
(surname and initials)

Approved by the methodical commission of KhNMU on the problems of dental profile

Protocol from  
"02<sup>nd</sup>" of September 2021 № 4

The Chairman

  
(signature)

prof. G.P. Ruzin  
(surname and initials)

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2. Andrieieva Olena Viktorivna – associate professor of the Department of Therapeutic Dentistry, PhD.

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**Face-to-face consultations:** by prior arrangement;

**Online consultations:** Moodle system, ZOOM system, GOOGLE MEET system according to the schedule;

**Location:** classes are held in the conditions of UDC KhNMU, remotely-in the ZOOM, GOOGLE MEET or MOODLE systems.

## INTRODUCTION

**Educational discipline syllabus** «Therapeutic dentistry» was prepared in accordance with educational and professional program (hereinafter referred to as “EPD”) “Dentistry” and Ukraine Standards for higher education (hereinafter referred to as “Standard”), second (master’s) level, knowledge 22 “Health care”, specialty 221 “Dentistry” - master. Educational and professional program "Dentistry" of the second (master's) level of higher education in the specialty 221 Dentistry knowledge 22 Health care Qualification: Master of Dentistry is based on:

1. Law of Ukraine "About the Higher Education" 01.07.2014 No. 1556-VII.
2. Law "About Education" of Ukraine 05.09.2017 No. 2145-VIII.
3. Resolutions of the Cabinet of 29.04.2015 No. 266 "About the approval of the list of the industries of knowledge and specialties on which training of applicants of the higher education is carried out.
4. Resolutions of the Cabinet of Ukraine of 28.03.2018 No. 334 "About the Statement of the Procedure of a Uniform State Qualification Examination for Applicants of Educational Degree of the Master in Specialties of the Industry of Knowledge" Health care "".
5. Resolutions of the Cabinet of 23.13.2013 No. 11341 "About the statement of the National frame of qualifications".
6. National qualifier of Ukraine: "The qualifier of professions" of recreation center 003:2010//Sotsinform Publishing house - To.: 2010.
7. Order of the Ministry of Economic Development and Trade of Ukraine of November 18, 2014 No. 1361 "About the adoption of change in the national qualifier of Ukraine of recreation center 003:2010" (change No. 2).
8. The order of the Ministry of Education and Science of Ukraine of 24.06.2019 the No. 879 "About the Approval of the Standard of the Higher Education in the Specialty 221" Stomatology "for the second (master) level of the higher education.

The course program determines the prerequisites for access to education, orientation and main focus of the program, the amount of ECTS credits required for a master's degree, a list of general and special (professional) competencies, normative and variable content of training, formulated in terms of learning outcomes and control requirements quality of higher education.

The department accepts qualified students of any race, national or ethnic origin, gender, age, people with special needs, any religion, sexual orientation, gender, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

### **Description of the discipline (abstract).**

Therapeutic dentistry is a discipline whose methods are aimed at maintaining the health of teeth, organs and tissues of the oral cavity, restoring their anatomical shape and physiological function, prevention of dental diseases by therapeutic methods. The study of the discipline "Therapeutic Dentistry" is carried out by students in the 3rd, 4th and 5th years of study in the V-X semesters.

The syllabus is organized with the application of modern pedagogical principles of organization of the educational process of higher education.

**The subject** of the discipline is the etiology, pathogenesis, clinical manifestations of diseases of the teeth, periodontium and oral mucosa, methods of treatment, as well as national and individual preventive measures to prevent such common diseases as caries and its complications, periodontal disease.

Teaching is based on the principles of evidence-based medicine using current standards (guidelines) of world professional societies.

The course covers the main practical and theoretical aspects of the future dentist.

**Interdisciplinary links:** the study of "Therapeutic Dentistry" is based on previously acquired knowledge of students in human anatomy, histology, cytology and embryology, pathological anatomy, biological chemistry, microbiology, virology and immunology, clinical pharmacology, pathomorphology, pathophysiology, pathophysiology venereology, social medicine and propaedeutics of therapeutic dentistry and integrates with these disciplines.

**Prerequisites.** The study of the discipline involves the prior mastering of credits of the course of propaedeutic of therapeutic dentistry, the material of basic disciplines and the availability of a sufficient educational level to master the issues of the discipline program.

**Postrequisites.** The main provisions of the discipline should be applied in the further study of therapeutic dentistry, in the study of professional disciplines, is the basis for preparation for the licensing exam EDKI, preparation for study in higher education institutions in the programs of the third educational level of higher education.

### **Educational discipline MOODLE website**

<http://distance.knmu.edu.ua/course/index.php?categoryid=51>

## **1. THE PURPOSE AND OBJECTIVES OF THE EDUCATIONAL DISCIPLINE**

**1.1. The purpose** of teaching the discipline "Therapeutic Dentistry" is to train a dentist who can diagnose and treat diseases of the teeth, periodontal tissues and oral mucosa.

**1.2. The main tasks** of studying the discipline "Therapeutic Dentistry" are the ability to examine the dental patient, the study of the leading syndromes and symptoms in therapeutic dentistry, justification and formulation of the preliminary diagnosis; ability to analyze the results of examination of a dental patient and make a differential diagnosis, make a final diagnosis of major diseases, detect and identify manifestations of somatic diseases in the oral cavity, determine the nature and principles of treatment in therapeutic dentistry, identify different clinical variants and complications of the most common diseases; secondary prevention of the most common diseases in the clinic of therapeutic dentistry.

**1.3. Competence and the result of the elective course**, the formation of which is facilitated by discipline (interrelation with the normative basis for the training of applicants for higher education, formulated in education result terms in EPD and Standard).

**1.3.1.** In accordance with the requirements of the standard, the discipline provides students with the acquisition of **competencies**:

### **integral:**

Ability to solve complex problems and problems in the field of health care in the specialty "Dentistry" in a professional activity or in the learning process, which involves research and / or innovation and is characterized by uncertainty of conditions and requirements.

### **general:**

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. The ability to preserve and multiply 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 forms of physical activity for active recreation and a healthy lifestyle.

### **special (professional, subject):**

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 region.
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 region.
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 region.
7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial region 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 region.
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 SLE.
17. Ability to legally support their own professional activities.
18. Ability to provide home care according to the protocols of tactical medicine.

**1.3.2.** The study of the discipline provides students with the acquisition of the following **program learning outcomes:**

**PLO 1.** Identify and identify the leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge of the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of a dental disease (according to list 2).

**PLO 2.** Collect information about the general condition of the patient, assess the psychomotor and physical development of the patient, the condition of the maxillofacial area, based on the results of laboratory and instrumental studies to assess information about the diagnosis (list 5).

**PLO 3.** Assign and analyze additional (mandatory and optional) methods of examination (laboratory, radiological, functional and / or instrumental) according to list 5, patients with diseases of organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (according to list 2).

**PLO 4.** 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 physician-manager in a medical institution (according to the list 2.1).

**PLO 5.** To diagnose 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).

**PLO 6.** Plan and implement measures for the prevention of dental diseases among the population to prevent the spread of dental diseases.

**PLO 7.** Analyze the epidemiological situation and carry out measures of mass and individual, general and local drug and non-drug prevention of dental diseases.

**PLO 8.** To determine the approach, plan, type and principle of treatment of dental disease (according to list 2) by making an informed decision according to existing algorithms and standard schemes.

**PLO 9.** To determine the nature of the mode of work, rest and the necessary diet in the treatment of dental diseases (according to list 2) on the basis of preliminary or final clinical diagnosis by making an informed decision according to existing algorithms and standard schemes.

**PLO 10.** To determine the tactics of managing a dental patient with somatic pathology (according to list 3) by making an informed decision according to existing algorithms and standard schemes.

**PLO 11.** To carry out treatment of the basic stomatologic diseases according to existing algorithms and standard schemes under the control of the doctor-manager in the conditions of medical institution (according to the list 2.1).

**PLO 12.** 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.

**PLO 13.** 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).

**PLO 14.** Analyze and evaluate state, social and medical information using standard approaches and computer information technologies.

**PLO 15.** Assess the impact of the environment on the health of the population in a medical institution by standard methods.

**PLO 16.** To form the purposes and to define structure of personal activity on the basis of result of the analysis of certain public and personal needs.

**PLO 17.** Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.

**PLO 18.** To be aware of and guided in its activities by civil rights, freedoms and responsibilities, to raise the general cultural level.

**PLO 19.** Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

**PLO 20.** To organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.

**PLO 21.** Perform medical manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and in different conditions (according to list 6).

**PLO 22.** Perform medical dental manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and in different conditions (according to list 7).

**PLO 23.** Perform manipulations of emergency medical care, using standard schemes, under any circumstances on the basis of a diagnosis of emergency (according to list 4) in a limited time (according to lists 6, 7).

**1.3.3.** The study of this discipline forms in students of **social skills (soft skills):**

- communication (implemented through: the method of working in groups and brainstorming during the analysis of clinical cases, the method of presenting the results of independent work and their protection in the group),
- teamwork (implemented through: group work method and brainstorming during the analysis of clinical cases),
- conflict management (implemented through: business games),
- time management (implemented through: the method of self-organization during classroom work in groups and independent work),
- leadership skills (implemented through: the method of presenting the results of independent work and their defense in the group).

**Discipline status: normative; *The format of the discipline is mixed*** - a discipline that has support in the Moodle system, teaching the discipline involves a combination of traditional forms of classroom learning with elements of distance learning, which uses available interactive information technology (ZOOM, Moodle, GOOGLE MEET), face-to-face and distance counseling.

**Teaching methods.**

Clinical (curation of patients with dental pathology), phantom, electronic information (presentations, video materials, methodical recommendations, lectures), scientific (participation in scientific developments in the discipline), control (tests, situational tasks, assessment of practical skills, defense of the clinical case).



## 2. INFORMATION SCOPE OF THE DISCIPLINE

### 2.1. Description of the discipline

Name of indicators	Branch of knowledge, direction of training, educational and qualification level	Characteristic of the discipline
		<b>full-time education</b>
The number of credits - 10.0	Training area <u>22 "Health care"</u> (code and name of the field of knowledge)	Normative discipline
The total number of hours is - 300	Specialty: <u>221 "Dentistry" - magistracy</u> (code and name of the specialty)	<b>Year:</b> <b>5<sup>th</sup> year</b>
		<b>Semester</b> <b>9<sup>th</sup>, 10<sup>th</sup></b>
Hours for full-time study: Auditory - 200 independent student work - 100	Educational and qualification level: <u>THE SECOND MASTER'S</u> <u>LEVEL</u>	<b>Lectures</b> <b>40 hours</b>
		<b>Practical</b> 160 hours
		<b>Laboratory classes</b>
		<b>Independent student work</b> 100 hours
		<b>Individual tasks</b>
		<b>Type of control</b> <b>Differential credit,</b> <b>Unified state qualification exam</b> <b>in specialty 221 "Dentistry"</b>

### 2.2.1. Lectures

№	Topic of the lecture	Hours	Lecture type
1.	Oral mucosa. Structure and functions. Pathological changes on mucosa. Primary and secondary elements of the lesion.	2	introductory, informative (thematic) lecture with visualization elements
2.	Classifications of diseases of the oral mucosa. Peculiarities of the examination of patients with oral mucosa diseases.	2	current informational (thematic) lecture with visualization elements
3.	Traumatic lesions of the oral mucosa (mechanical, chemical, physical, electrical injuries). Radiation damage. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.	2	current informational (thematic) lecture with visualization elements
4.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of autoinfection stomatitis.	2	current informational (thematic) lecture with visualization elements
5.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of viral diseases (influenza, murrain, infection monucleosis)	2	current informational (thematic) lecture with visualization elements
6.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of HIV/AIDS. Manifestations in oro-facial region. Tactics of dentist.	2	current informational (thematic) lecture with visualization elements
7.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of diphtheria and tuberculosis. Manifestations in oro-facial region. Tactics of dentist.	2	current informational (thematic) lecture with visualization elements
8.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of syphilis and gonorrhoea. Manifestations in oro-facial region. Tactics of dentist.	2	current informational (thematic) lecture with visualization elements
9.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of mycotic lesions in oral cavity	2	current informational (thematic) lecture with visualization elements
10.	Manifestations of diseases of gastro-intestinal, cardio-vascular, endocrine, nervous systems in oral cavity. Tactics of dentist.	2	current informational (thematic) lecture with visualization elements
11.	Manifestations of hypovitaminosis in oral cavity. Tactics of dentist.	2	current informational (thematic) lecture with visualization elements

12.	Changes in the oral mucosa in diseases of the blood and blood-forming organs.	2	current informational (thematic) lecture with visualization elements
13.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of allergic diseases with changes in oral cavity.	2	current informational (thematic) lecture with visualization elements
14.	Etiology, pathogenesis, clinic, diagnosis, treatment and prevention of dermatoses with an autoimmune component.	2	current informational (thematic) lecture with visualization elements
15.	Manifestations of exogenous intoxications in oral cavity. Tactics of dentist.	2	current informational (thematic) lecture with visualization elements
16.	Cheilitis. Etiology, clinic, diagnosis, treatment and prevention.	2	current informational (thematic) lecture with visualization elements
17.	Glossitis. Etiology, clinic, diagnosis, treatment and prevention.	2	current informational (thematic) lecture with visualization elements
18.	Precancerous diseases. Classification of precancerous lesions of the oral mucosa and red lip border. Prognosis and prevention of precancerous diseases. Dispanserization.	2	current informational (thematic) lecture with visualization elements
19.	Usage of physical factors in oral mucosa diseases treatment.	2	current informational (thematic) lecture with visualization elements
20.	Clinic, diagnosis, treatment and prevention of stomatogenous chronic intoxication.	2	current informational (thematic) lecture with visualization elements
	<b>Total</b>	<b>40</b>	

### 2.2.2. Topics of seminars.

Not provided for in the curriculum.

### 2.2.3. Topics of practical classes of the elective course "Therapeutic dentistry"

#### Thematic plan of practical classes of section 4

№	Name of the topic	Num ber of hours	Teaching methods	Control forms
1.	Anatomical-physiological, histological features of the oral mucosa and red lips. Protective factors. Saliva, its composition and physiological role. Salivation disorders. Etiology, pathogenesis. Clinic, diagnosis, treatment, prevention. Classifications of diseases of the oral mucosa (by Danilevsky, Maksimenko, ICD-10).	4	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
2.	Peculiarities of the examination of patients with oral mucosa diseases. Primary and secondary elements of the lesion.	4	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
3.	Traumatic lesions of the oral mucosa (mechanical, chemical, physical, electrical injuries). Radiation damage. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.	4	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks

4.	<p>Primary autoinfectious stomatitis. Acute catarrhal stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.</p> <p>Acute and chronic recurrent herpes. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.</p> <p>Acute ulcerative stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.</p> <p>Fungal lesions of the oral mucosa. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	oral examination, individual tasks
5.	<p>Influenza, infectious mononucleosis, murrain. Etiology, pathogenesis, clinical manifestations on the oral mucosa, diagnosis, treatment and prevention/ AIDS. Etiology, pathogenesis. Clinical picture, etiology of the disease. Manifestations on the oral mucosa. Modern methods of diagnosis and treatment. Tactics of a dentist.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	oral examination, individual tasks
6.	<p>Tuberculosis. Etiology, pathogenesis, clinical manifestations on the oral mucosa, diagnosis. Treatment and prevention. Tactics of a dentist.</p> <p>Syphilis. Gonorrhoea. Etiology, pathogenesis, clinical manifestations on the oral mucosa, diagnosis. Treatment and prevention. Tactics of a dentist.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	oral examination, individual tasks
7.	<p>Changes in the mucous membrane of the oral cavity in diseases of the digestive tract (peptic ulcer, gastritis, enteritis, colitis, chronic hepatitis). Discoloration, swelling of the oral mucosa. Coated tongue. Tactics of a dentist.</p> <p>Changes in the oral mucosa in diseases of the cardiovascular system (circulatory failure, hypertension). Trophic ulcer. Bladder-vascular syndrome. Tactics of a dentist.</p> <p>Changes of oral mucosa in diseases of the endocrine system (acromegaly, Itsenko-Cushing's disease, diabetes mellitus). Xerostomia. Tactics of a dentist.</p> <p>Changes in the oral mucosa in hypo- and avitaminosis A, C. Tactics of the dentist. Changes in the oral mucosa in hypo- and avitaminosis group B and PP. Tactics of a dentist.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	oral examination, individual tasks

8.	<p>Changes in the oral mucosa in diseases of the blood and blood-forming organs. Acute leukemia. Chronic leukemia. Agranulocytosis. Tactics of a dentist.</p> <p>Changes in the oral mucosa in diseases of the blood and blood-forming organs. Anemia. Vakez's disease. Werlhof's disease. Tactics of a dentist.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	<p>oral examination, individual tasks</p>
9.	<p>Changes in the oral mucosa in dermatoses with an autoimmune component. Pemphigus vulgaris. Etiology, pathogenesis, clinic, diagnosis. Tactics of a dentist.</p> <p>Changes in the oral mucosa in dermatoses with an autoimmune component. Red lichen planus. Etiology, pathogenesis, clinic, diagnosis. Tactics of a dentist.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	<p>oral examination, individual tasks</p>
10.	<p>Anaphylactic shock. Quincke's edema. Causes, clinical manifestations, emergency care.</p> <p>Allergic drug stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.</p> <p>Exudative erythema multiforme. Stevens-Johnson syndrome. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prevention.</p> <p>Chronic recurrent aphthous stomatitis, Behcet's syndrome. Pathogenesis, clinic, diagnosis, treatment and prevention.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	<p>oral examination, individual tasks</p>
11.	<p>Primary glossitis. Desquamative and rhomboid glossitis. Placated and black hairy tongue. Clinic, diagnosis, treatment and prevention.</p> <p>Neurogenic diseases of the tongue. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.</p> <p>Cheilitis. Etiology, clinic, diagnosis, treatment and prevention.</p>	4	<p>story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training</p>	<p>oral examination, individual tasks</p>

12.	Precancerous diseases. Classification of precancerous lesions of the oral mucosa and red lip border. Prognosis and prevention of precancerous diseases. Obligatory precancers of a mucous membrane of an oral cavity and a red border of lips. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention. Optional precancerous lesions of the oral mucosa and red lip border. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.	4	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
13.	Changes in the mucous membrane of the oral cavity in exogenous intoxications. Mercury and bismuth stomatitis. Diagnosis. Tactics of a dentist. Dental chronic intoxication. Etiology. Pathogenesis. Clinic, diagnosis, treatment and prevention of stomatogenous chronic intoxication	4	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
14.	<b>Final lesson</b>	4	work with simulation equipment, phantoms, computer control	oral examination; written survey; test control
15.	<b>Defend of case history</b>	4	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
	<b>Totally</b>	<b>60</b>		

#### Thematic plan of practical classes of section 5

№	Name of the topic	Number of hours	Teaching methods	Control forms
1.	Differential diagnosis of non-carious lesions of the hard tissues of the teeth. Modern methods of teeth whitening and restoration with non-carious lesions. Physical factors in the diagnosis and treatment of non-carious dental lesions.	6	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks

2.	Differential diagnosis of dental caries. Modern methods of treatment and prevention of dental caries. Physical factors in the diagnosis and treatment of carious lesions of the teeth.	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
3.	<p>Differential diagnosis of pulpitis. Dystrophic changes in the pulp in general diseases of the body and their role in the choice of treatment. Providing emergency care to patients with acute forms of pulpitis.</p> <p>Modern technologies of pulpitis treatment. Physical factors in the treatment of pulpitis.</p> <p>Modern endodontic tools for cleaning, expansion and filling of root canals. ISO standards. Methods of use. Instrumental treatment of root canals by the method of "Step-back" "Crown-down" technique</p>	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
4.	<p>Differential diagnosis of periodontitis. X-ray diagnostics. Radiological characteristics of changes in the periodontium according to SA Vindruhu. Errors and complications in the diagnosis of pulpitis and periodontitis. Providing emergency care to patients with acute forms of periodontitis.</p> <p>Modern technologies for the treatment of periodontitis. Physical factors in the treatment of periodontitis.</p> <p>Modern endodontic tools for cleaning, expansion and filling of root canals. ISO standards. Methods of use. Instrumental processing of root canals by the method of "Step-back" and "Crown-down" technique.</p>	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
5.	Differential and laboratory diagnosis of catarrhal, hypertrophic, ulcerative-necrotic gingivitis and localized periodontitis. Treatment and prevention. The use of physical factors in the diagnosis and treatment of inflammatory periodontal disease.	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks



6.	Differential diagnosis of periodontitis and periodontitis. Modern methods of treatment and prevention. Emergency care for abscessive periodontitis. The use of physical factors in the diagnosis and treatment of dystrophic-inflammatory and dystrophic periodontal diseases.	6	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
7.	Differential diagnosis of traumatic injuries of the oral mucosa. Modern methods of treatment and prevention. The use of physical factors in the diagnosis and treatment of traumatic injuries SOPR.	6	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
8.	Differential and laboratory diagnosis of primary (autoinfectious) lesions of the oral mucosa. Acute herpetic stomatitis. Acute aphthous stomatitis. Acute ulcerative-necrotic stomatitis. Modern methods of treatment and prevention of primary stomatitis.	6	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
9.	Differential diagnosis of manifestations of viral diseases on the oral mucosa. AIDS, influenza, foot and mouth disease, infectious mononucleosis. Modern methods of diagnosis, treatment and prevention of HIV infection.	6	story-explanation, conversation, illustration, presentation, videos, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks

10.	Differential diagnosis of manifestations of bacterial diseases on the oral mucosa. Diphtheria, tuberculosis, syphilis, gonorrhoea. Tactics of a dentist.	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
11.	Differential diagnosis of lesions of the oral mucosa in diseases of the gastrointestinal tract, cardiovascular, endocrine and nervous systems. Modern methods of treatment and prevention.	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
12.	Differential diagnosis of manifestations of diseases of blood and hematopoietic organs on the mucous membrane of the oral cavity. Leukemia, agranulocytosis, anemia and thrombocytopenic purpura. Tactics of a dentist.	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks
13.	Differential diagnosis of complications of drug therapy associated with allergies, dysbacteriosis and intoxication. Tactics of a dentist. Providing emergency care.	6	story-explanation, conversation, illustration, presentation, videos, work with simulation equipment, phantoms, demonstration, observation, modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer training	oral examination, individual tasks

14.	Differential diagnosis of manifestations on the oral mucosa of dermatoses with an autoimmune component. Vesicles, red flat herpes. Clinic, diagnosis, tactics of a dentist.	6	work with simulation equipment, phantoms, computer control	oral examination; written survey; test control
15.	Differential diagnosis of diseases of the tongue and lips. Modern methods of treatment and prevention. Differential diagnosis of precancerous conditions of the oral mucosa and red lip border. Laboratory methods of diagnosis. Obligatory and optional precancers. Modern methods of treatment and prevention	5	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	oral examination; individual tasks
16.	Final lesson.		work with simulation equipment, phantoms, computer control	oral examination; written survey; test control
17.	Diff. credit (computer part, practical skills, oral part)	6	modeling of processes and situations, work in the clinic (standardized patient, non-standardized patient), computer control, work with simulation equipment, phantoms	Diff. credit
	<b>Totally</b>	100		

#### 2.2.4. Topics of laboratory classes.

Not provided for in the curriculum.

### 2.2.5. Independent work.

№	Topic	Number of hours	Teaching methods	Control forms
1.	Preparation for practical classes - theoretical training and development of practical skills, writing an academic history of the disease.	13	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	oral examination; individual tasks
2.	Independent study of topics that are not included in the curriculum:			
2.1.	Acute herpetic stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.2.	Chronic ulcerative stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.3.	AIDS. Modern methods of diagnosis and treatment.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.4.	Diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.5.	Changes in the oral mucosa in dermatoses with an autoimmune component. Lupus erythematosus. Tactics of the dentist.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.6.	Changes in the oral mucosa in dermatoses with an autoimmune component. Pemphigoid.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.7.	Changes in the mucous membrane of the oral cavity in radiation sickness	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
2.8.	Precancerous diseases. Prognosis and prevention of precancerous diseases.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.

3.	Individual SRH		review of educational and methodical literature, writing essays, conducting research	Differentiated offset.
4.	Preparation for final control	3	virtual consultation, computer training, independent work with simulation equipment, phantoms	oral examination; written survey; test control
5.	Preparation and writing of academic medical history.	8	independent work with literature, virtual consultation	Differentiated offset.
<b>Total</b>		<b>40</b>		

#### Types of independent work of applicants (SRZ) of section 5

№	Topic	Number of hours	Teaching methods	Control forms
1.	Preparation for practical classes - theoretical training and development of practical skills.	30	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment, phantoms	oral examination; individual tasks
2.	Independent work on topics that are not included in the lesson plan:			
2.1.	Etiology and pathogenesis of dental caries.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
2.2.	Radiological characteristics of changes in the periodontium according to SA Vindruhu.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
2.3.	Modern endodontic instruments for cleaning, dilating and filling root canals. ISO standards. Methods of use.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
2.4.	Instrumental processing of root canals "Step-back" and "Crown-down" technique.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
2.5.	First aid for patients with emergencies (anaphylactic shock, fainting, collapse, hypertensive crisis, acute heart failure). Algorithm of actions.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
2.6.	Theoretical foundations of prevention, levels, types and methods of prevention.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
2.7.	Medical examination of dental patients.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.

2.8.	Analysis of quantitative and qualitative indicators of the work of a dentist.	2	presentation, videos, videos, webinar, virtual consultation, computer training, independent work with simulation equipment,	Differentiated offset.
3.	Individual SRH		review of educational and methodical literature, writing essays, conducting research	Differentiated offset.
4.	Preparation for final control	4	virtual consultation, computer training, independent work with simulation equipment, phantoms	oral examination; written survey; test control
5.	Preparation for diff. offset.	10	virtual consultation, computer training, independent work with simulation equipment, phantoms	Differentiated offset.
<b>Total</b>		<b>60</b>		

## Teaching methods

**Teaching methods** are tested and systematically functioning ways of interconnected activity of those who teach (teaching methods) and those who learn (teaching methods), aimed at solving certain educational, upbringing and developmental tasks in the educational process.

The following teaching methods are used in the study of the discipline:

- **verbal** (lecture, explanation, story, conversation, instruction);
- **visual** (observation, illustration, demonstration);
- **practical** (different types of exercises, graphic work, experiment, practice).
- **explanatory-illustrative or information-receptive**, which provide for the presentation of ready-made information by the teacher and its assimilation by students;
- **reproductive**, which is based on the performance of various tasks on the model;
- **method of problem presentation**, which is that the teacher poses a problem and solves it himself, demonstrating the contradictions that characterize the process of cognition, while the task of students is to control the sequence of presentation of material, materiality of evidence, predicting the next steps of the teacher; this MN is realized by training students in problem situations for the purpose of successful preliminary preparation for future work in real conditions of practical medical institutions;
- **partial-search or heuristic**, aimed at mastering certain elements of search activity, for example: the teacher formulates a problem, students - a hypothesis;
- **research**, the essence of which is to organize the teacher search creative activities of students by setting new problems and problems.

Teaching methods can also be divided into:

- methods that provide **perception and assimilation** of knowledge by students (lectures, independent work, instruction, consultation);
- methods of **applying knowledge and acquiring and consolidating skills and abilities** (practical classes, control tasks, work in the clinic, practice);
- methods of **testing and assessing knowledge, skills and abilities**;
- methods of **encouragement and punishment**.

It should be remembered that the maximum effectiveness of training can be achieved only with a rational (systemic) combination of different methods.

## Policy assessment

### Control methods

The general purpose of control is subordinated to the main task - to ensure a high theoretical and scientific level of educational work and, consequently, quality training. The specific purpose of control is to determine the quality of learning material, the degree of compliance of the formed competencies with the goals and objectives of teaching the discipline.

**Principles of control:** comprehensive nature, systematicity, purposefulness, objectivity, efficiency, unity of requirements, constant improvement of all its forms and methods.

The effective functioning of the system of pedagogical control requires compliance with certain conditions:

- teachers and students, assessing the state of educational work, act on the only agreed criteria, the justification of which is known to all in advance;
- assessments obtained as a result of control are considered inviolable, are not in doubt both by those who control and by those who are controlled, as they are based on objective criteria known to both parties;
- control and its results require publicity, so that everyone could study them carefully, make reasonable conclusions based on this, which set up for active positive work aimed at the necessary adjustment of the educational process.

The following requirements are set for the control of knowledge, skills and abilities:

- **objectivity** - the creation of conditions under which the knowledge, skills and abilities of students would be most accurately expressed, the introduction of uniform requirements, fair treatment of each student, the inadmissibility of elements of bias, the desire to find negative facts or impose purely personal views on these or those theoretical problems, methodical receptions, etc. ; at the same time, it should be remembered that the objectivity of control is incompatible with a liberal attitude to shortcomings and errors, superficiality and narrowness in the analysis and evaluation of the work being audited;
- **validity of assessments** - their argumentation;
- **regularity** - an important psychological factor that contributes to the formation of such qualities as organization and discipline, forms perseverance and focus on achieving the goal;
- **individual and differentiated approach to the assessment of knowledge, skills and abilities** involves the use of such didactic conditions that reduce psychological tension, take into account the characteristics of the student's

nervous system, his character, potential, abilities, etc., making the teacher able to more fully, correctly and more objectively identify and evaluate the knowledge of each student;

- **comprehensiveness and optimality implies:** first, the adequacy of control over learning objectives, i.e. the substantive side of control should control what students are taught and take into account the amount of material to be mastered; secondly, the validity of the control, it should cover all the knowledge, skills and abilities that are controlled; thirdly, reliability - the stability of the results obtained by repeated control after a certain time, as well as the proximity of the results during the control by different teachers;
- **professional orientation of control**, which is due to the targeted training of the specialist and thus helps to increase the motivation of cognitive activity of students - future professionals.

#### **Forms of control:**

- by student coverage: frontal, individual, pair, group;
- by method of implementation: oral, written;
- by way of organization: teacher control, mutual control, self-control;
- on the use of teaching aids: control with the help of printed media, three-dimensional means (models, models, simulators, devices), technical means, computer systems, including support for multimedia files;
- by level of standardization: standardized, non-standardized.

Each of the forms of control has features and is determined by the purpose, content, methods and nature of learning.

**Oral questioning** allows you to control not only knowledge but also verbal abilities, helps to correct speech errors. Reproduction of the material contributes to its better memorization, active use of scientific concepts, which is impossible without sufficient application of them in speech.

A **written survey** helps to determine the level of mastery of the material, but the possibility of copying should be ruled out and students should be closely monitored during this survey. Written work requires a fairly large amount of teacher time to test.

An integral part of the system of educational process in higher medical educational institutions of III and IV levels of school accreditation is **testing** as a standardized assessment method that meets the new goals and objectives of higher medical education and promotes individualization and manageability of the educational process.

All forms of control, with their skillful implementation, are accompanied by instructions, advice and recommendations of the student's teacher. Control in all cases allows you to draw the right conclusions for the future.

#### **Assessment and mark.**

The practical application of any form of pedagogical control ends with assessments and marks.

**Assessment** is a method and result of establishing the fact of conformity or inconsistency of acquired knowledge and formed skills and abilities to the goals and objectives of training. The assessment also involves identifying the reasons that hindered learning and the means of organizing learning activities to address gaps in knowledge.

**Mark** - a numerical analogue of the assessment and has several rank values.

The assessment of the quality of knowledge, skills and abilities of students is based on the requirements of programs in academic disciplines, but regardless of the specifics of the subject, the general requirements are as follows:

- understanding and degree of mastering the question, completeness, which is measured by the amount of program knowledge about the object being studied;
- depth, which characterizes the set of connections between the knowledge perceived by students;
- methodological substantiation of knowledge;
- acquaintance with the basic literature on the discipline, as well as with modern periodical domestic and foreign literature in the specialty;
- ability to apply theory in practice, solve situational problems, etc .; efficiency, ie the number of situations in which the student can apply their knowledge in practice;
- acquaintance with the history and current state of science and prospects for its development;
- logic, structure, answer style and ability of the student to defend the scientific and theoretical positions put forward, awareness, generalization, concreteness;
- flexibility, i.e. the student's ability to independently find situations in which knowledge is applied;
- strength of knowledge.

In the process of pedagogical control, it should be taken into account that:

- it is inexpedient to control what should be mastered by the student at the level of acquaintance, initial representation or recognition;
- control should not be applied if the teacher is sure that all students will cope with the task 100%, at the same time it is sometimes advisable to give such tasks that most students can cope with, because in this way students' faith in their strength is stimulated;
- well-organized phased control reduces the need for the final or even makes the latter unnecessary;
- it is necessary to vary the means of control;



- creating a calm and friendly atmosphere in the control process contributes to the better work of students and has a positive effect on its results.

**Assessment of the current educational activity of the student** is carried out at mastering of each theme of the section by passing an estimation on a 4-point traditional scale, at the end the average estimation which is converted into points is calculated.

**The maximum number of points** for the current educational activities of the student is **120 points**.

Assessment of students' independent work, which is provided in the topic together with the classroom work, is carried out during the current control of the topic in the relevant classroom.

### 3. EVALUATION CRITERIA

**3.1. Evaluation of the education success of students** is carried out on the basis of the current "Instructions for evaluating the educational activities of students of KhNMU", approved by the order of KhNMU from 21.08.2021 №181.

#### Evaluation of current learning activities (CLA)

**Current control** of knowledge of students is carried out at each practical lesson in accordance with the specific objectives of the topic, during the individual work of the teacher with the student for those topics that the student develops independently and they are not part of the practical lesson. The following means of diagnosing the level of preparation of students are used: computer tests; solving situational problems; structured written works; structured control of practical skills and abilities.

When assessing the mastery of each subject of the discipline (CLA) and the final lesson (FL), the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".

The final score for current learning activities (CLA) and final classes (FL) is defined as the arithmetic mean of traditional grades for each class and PZ, rounded to 2 decimal places and listed in a multi-point scale according to Table 1.

The minimum number of points that an applicant must score for admission to the differentiated test - 70 points, the minimum positive score on the differentiated test, respectively, 50 points.

**Table 1**

#### Recalculation of the average score for current activities in a multi-point scale (for disciplines that end with a d/o or exam)

4-point scale	120- point scale	4- point scale	120- point scale
5	120	3.91-3,94	94
4.95-4,99	119	3.87-3,9	93
4.91-4,94	118	3.83- 3,86	92
4.87-4,9	117	3.79- 3,82	91
4.83-4,86	116	3.74-3,78	90
4.79-4,82	115	3.7- 3,73	89
4.75-4,78	114	3.66- 3,69	88
4.7-4,74	113	3.62- 3,65	87
4.66-4,69	112	3.58-3,61	86
4.62-4,65	111	3.54- 3,57	85
4.58-4,61	110	3.49- 3,53	84
4.54-4,57	109	3.45-3,48	83
4.5-4,53	108	3.41-3,44	82
4.45-4,49	107	3.37-3,4	81
4.41-4,44	106	3.33- 3,36	80
4.37-4,4	105	3.29-3,32	79
4.33-4,36	104	3.25-3,28	78
4.29-4,32	103	3.21-3,24	77
4.25- 4,28	102	3.18-3,2	76
4.2- 4,24	101	3.15- 3,17	75
4.16- 4,19	100	3.13- 3,14	74
4.12- 4,15	99	3.1- 3,12	73
4.08- 4,11	98	3.07- 3,09	72
4.04- 4,07	97	3.04-3,06	71
3.99-4,03	96	3.0-3,03	70
3.95- 3,98	95	Less than 3	Not enough

### Assessment of independent work of students

Assessment of students' independent work, which is provided in the topic along with classroom work, is carried out during the current control of the topic in the relevant classroom.

Assimilation of topics that are submitted only for independent work and are not included in the topics of classroom training, is controlled during the final control (during differential test).

### Individual tasks

Table 2 lists the individual tasks (participation with reports in student conferences, profile competitions, preparation of analytical reviews with presentations with plagiarism testing, etc.) with the definition of the number of points for their implementation, which can be added as incentives (not more than 10).

Points for individual tasks are awarded to the student only once as a commission (commission - head of the department, head teacher, group teacher) only if they are successfully completed and defended. In no case may the total amount of points for IPA exceed 120 points.

### Evaluation of individual tasks of applicants

№	Name of individual tasks	Number of evaluation points
1.	Participation in the competition Olympiad among Ukrainian universities	up to 10 points
2.	Participation in conferences with a report	up to 10 points
3.	Participation in conferences with a poster report	up to 8 points
4.	Participation in conferences (confirmed by a certificate)	up to 2 points
5.	Participation in competitions on professional skills	up to 10 points
6.	Scientific publications (articles)	up to 8 points
7.	Scientific publications (abstracts)	up to 6 points
8.	Analytical review with a multimedia presentation on the topic of the section	up to 6 points
9.	Production of a visual aid (stand, phantom model, etc.)	up to 8 points

### Assessment of the final lesson

**The final lesson (FL)** must be held during the semester on schedule, during classes. The software is received by the teacher of the academic group or the exchange of related groups between teachers is carried out.

To prepare for the software on the information stand of the department, in the methodical office of the department, in the workbooks of students, the relevant materials are presented:

- list of theoretical questions (including questions on independent work);
- list of practical skills;
- a list of drugs, prescriptions of which must be prescribed by the student;
- list of medical records;
- criteria for assessing the knowledge and skills of students;
- schedule of students completing missed classes during the semester;
- basic and anchor test tasks of LII "Step".

### Conducting the final lesson:

1. Solving a package of test tasks on the content of the educational material of the section in the amount of **30 tests**. Evaluation criterion - **90%** of correctly solved tasks; "Passed" or "did not pass");

2. Assessment of the development of practical skills (assessment criteria - "performed" or "failed"). The level of mastering practical skills by students is assessed by the teacher based on the results of practical classes in the relevant section;

3. During the assessment of the student's knowledge on theoretical issues included in this final lesson (SO), the student is given a traditional grade, which is converted into a multi-point scale together with the grades for IPA (Table 1).

Theoretical questions and practical skills also include practical and professional training tasks that reflect the skills and abilities during the supervision of thematic patients, evaluation of laboratory and instrumental research methods and choice of treatment tactics and tasks for diagnosis and care in emergencies (within the EQF). specialties and RNPD).

#### Evaluation criteria.

Grades "excellent" are given to students who have shown detailed, systematic and in-depth knowledge of the curriculum, the ability to freely perform the tasks provided by the program, and who have mastered the basic and familiar with additional literature recommended by the program.

The grade "good" is given to students who have shown the systematic nature of knowledge in therapeutic dentistry and are able to independently replenish and update them in the course of further educational work and professional activities.

Grades "satisfactory" are given to students who answer only those questions that are included in the mandatory minimum list; who are familiar with the main literature recommended by the program.

Grades "unsatisfactory" are given to students who have identified gaps in knowledge of the basic curriculum, who have made fundamental errors in the tasks provided by the program, who can not continue their studies without additional classes in therapeutic dentistry.

#### Differentiated credit

Differentiated credit in the discipline is a process during which the received for the course are checked:

- level of theoretical knowledge;
- development of creative thinking;
- skills of independent work;
- competencies - the ability to synthesize the acquired knowledge and apply them in solving practical problems.

#### Conducting a differentiated test

Differentiated test is conducted for 5th year students by a group teacher in the last lesson in therapeutic dentistry in the autumn and spring semesters on the topics of the discipline studied during the semester. The obtained theoretical knowledge, acquired skills of independent work, development of creative thinking, developed skills of synthesis of knowledge and their practical use (competencies) are tested on the differential. Differentiated credit consists of 3 parts: computer test control, assessment of practical skills and the level of theoretical knowledge.

Computer test control, which involves solving a package of test tasks LII on the content of educational material in the amount of 100 tests and is conducted for 2-3 lessons before the last lesson of the semester. Evaluation criterion - 90% of correctly solved tasks. Test tasks are evaluated by the criterion "passed" / "failed": with 90 or more correct answers (90%) - "passed"; less than 90 - "did not pass".

Assessment of the acquisition of practical skills and theoretical knowledge on all topics of the discipline is carried out on the day of compilation of difzalik.

Assessment of the level of practical skills (according to the list of practical skills) and theoretical knowledge is based on the tickets drawn up at the department, which include all topics of the relevant sections of the discipline. Also in the tickets there are tasks for practical and professional training, reflecting the skills and abilities during the supervision of thematic patients, evaluation of laboratory and instrumental research methods and choice of treatment tactics, tasks for diagnosis and care in emergencies, which are defined in the lists of EQF specialties, medical manipulations according to the List of 5 Industry standards. Evaluation criteria are given in tables 3, 4.

**Table 2**

**Criteria for assessing theoretical knowledge  
on a differentiated test in the spring semester of 2021-2022 academic year**

Number of questions	«5»	«4»	«3»	Oral answer for tickets, which include the theoretical part of the discipline	For each answer the student receives from 12.5 to 20 points, which corresponds to: "5" - 16 points; "4" - 13 points; "3" - 10 points.
1	16	13	10		
2	16	13	10		
3	16	13	10		
4	16	13	10		
5	16	13	10		
	80	65	50		

Criteria for evaluating the results of educational activities students in the discipline

Rating	Evaluation criteria
"Perfectly"	The student shows special creative abilities, is able to acquire knowledge independently, without the help of the teacher finds and processes the necessary information, is able to use the acquired knowledge and skills for decision-making in unusual situations, convincingly argues answers, independently reveals own talents and inclinations.
"Very good"	The student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects mistakes, the number of which is insignificant
"Fine"	The student is able to compare, summarize, systematize information under the guidance of the teacher; as a whole to apply it independently in practice; control their own activities; to correct mistakes, among which there are significant ones, to choose arguments to confirm opinions
"Satisfactory"	The student reproduces a significant part of the theoretical material, shows knowledge and understanding of the basic principles; with the help of the teacher can analyze the educational material, correct mistakes, among which there are a significant number of significant ones
"Enough"	The student has the study material at a level higher than the initial, a significant part of it is reproduced at the reproductive level
"Unsatisfactory"	The student has the material at the level of individual fragments that make up a small part of the study material
with the possibility of re-assembling the semester control	The student has the material at the level of elementary recognition and reproduction of individual facts, elements, objects
<b>In particular, criteria for assessing practical skills in disciplines</b>	
"Perfectly"	The student corresponds to a high (creative) level of competence: the student shows special creative abilities, without mistakes independently demonstrates the implementation of practical skills and has systematic theoretical knowledge (knows the methods of practical skills, indications and contraindications, possible complications, etc.) and has the ability to accept solutions in non-standard situations.
"Fine"	The student independently demonstrates the performance of practical skills, admitting some inaccuracies, which he quickly corrects, has theoretical knowledge (knows the method of performing practical skills, indications and contraindications, possible complications, etc.).
"Satisfactory"	The student demonstrates the implementation of practical skills, making some mistakes that can be corrected by their teacher, has satisfactory theoretical knowledge (knows the basic principles of methods of practical skills, indications and contraindications, possible complications, etc.).
"Unsatisfactory"	The student can not independently demonstrate practical skills (performs them, making gross errors), does not have a sufficient level of theoretical knowledge (does not know the methods of performing practical skills, indications and contraindications, possible complications, etc.).

### Grade from the discipline

If the discipline is studied for 2 or more semesters, the grade is determined as the arithmetic mean of the scores for all semesters during which the discipline was studied, which are translated into a 120-point ECTS scale (Table 1) with the addition of points obtained directly to diff. offset.

The maximum number of points that an student can score for studying the discipline - 200 points, including the maximum number of points for current educational activities - 120 points, as well as the maximum number of points for the results of differential test - 80 points. The minimum number of points is 120, including the minimum current educational activity - 70 and the results of diff. credit - 50 points.

### Discipline assessment technology

Assessment of the results of the study of disciplines is carried out immediately after the differentiated test. The grade in the discipline is defined as the sum of points for HDPE and differential test and is from 120 to 200 points.

**Table 3**

**Correspondence of discipline assessment in points to assessment in traditional assessments**

Score on a 200-point scale	Assessment on the ECTS scale	Score on a four-point (national) scale
180–200	A	Excellent
160–179	B	Good
150–159	C	Good
130-149	D	Satisfactorily
120-129	E	Satisfactorily
Less than 120	F, FX	Unsatisfactorily

The grade in the discipline is given only to students who have passed all the final control classes and differentiated offset.

**Assessment of attestation of graduates** is carried out in accordance with: Regulations on the organization and conduct of attestation of graduates at Kharkiv National Medical University; Regulations on the organization and conduct of an objective structured practical (clinical) exam for students of Kharkiv National Medical University, approved by the order of KhNMU from 01.09.2020. №242; Regulations on the preparation and defense of master's theses of students who obtain a higher education degree "master" at KhNMU, approved by the order of KhNMU from 27.08.2019. №305; Regulations on preparation and defense of qualification (bachelor's) works of students who receive the degree of higher education "bachelor" in the Kharkiv national medical university, approved by the order of KhNMU from 03.02.2020 № 18.

### 3.2. Questions for final certification

#### **The list of theoretical questions for final certification from section "Methods of examination of a dental patient. Damage of the hard tissues of the teeth"**

1. Therapeutic dentistry as the main dental discipline. Tasks of therapeutic dentistry, the relationship with general clinical and dental disciplines. Sections of therapeutic dentistry. Contribution by E.M. Hofung, I.O. Novik in solving current problems of dentistry.
2. The structure of the dental clinic and its therapeutic department. Equipping the workplace of a dentist. Ethics and deontology in dentistry. Iatrogenic diseases.
3. Occupational diseases of the dentist and their prevention.
4. Emergencies in therapeutic dentistry: causes of development, clinical manifestations. Providing emergency care.
5. Principles and scheme of examination of a dental patient. The value and informativeness of the subjective method of examination, the sequence of its conduct.
6. The main methods of objective examination of a dental patient: methods, their informativeness and significance.
7. Additional methods of objective examination of a dental patient: methods of conducting, interpretation of results.
8. Medical documentation of therapeutic reception: rules of filling. Medical card of a dental patient (f.043 / 0) - medical, scientific and legal document.
9. Oral hygiene. Means and methods. The value of dental plaque in the pathogenesis of dental caries.
10. Determination of the hygienic index by Fedorov-Volodkina, qualitative and quantitative characteristics, interpretation of results.
11. Determination of the hygienic index by Green - Vermillion, interpretation of results.
12. Dental deposits. Views, warehouse. The mechanism of plaque and tartar formation. The value of dental plaque in the occurrence of caries.
13. The concept of professional teeth cleaning. Definitions, methods of removal of dental plaque, tools and instruments.
14. "Caries and non-cariou lesions of the teeth."
15. Tooth caries. Definition. Epidemiology of caries: prevalence, intensity, increase in intensity; methods of their determination.
16. Tooth caries. Classification of caries (working).
17. The theory of the origin and development of caries by Miller's. The essence, positive and negative sides.
18. The theory of the origin and development of caries by D.A. Entin. The essence, positive and negative sides.
19. The theory of the origin and development of caries by A.I. Rybakov. The essence, positive and negative sides.
20. Theories of the origin and development of caries by E.V. Borovsky, P.A. Leus. The essence, positive and negative sides.
21. Modern interpretation of the etiology of dental caries. Types of microorganisms of the oral cavity. Factors that determine their cariogenicity.
22. Enamel resistance test. The essence, methods, interpretation of results.
23. The concept of structural and functional resistance of enamel. The concept and meaning of dental cerebrospinal fluid.
24. Pathomorphology, clinic, diagnosis of acute initial (in the stage of spots) caries.
25. Treatment of acute initial caries (in the stage of white spot). Medicines, methods of conducting.
26. Pathomorphology, clinic, diagnosis of acute superficial caries.
27. Pathomorphology, clinic, diagnosis of chronic superficial caries.
28. Pathomorphology, clinic, diagnosis of acute secondary caries.
29. Pathomorphology in chronic secondary caries.
30. Clinic, diagnosis of chronic secondary caries.
31. Treatment of acute and chronic superficial and secondary caries.
32. Pathomorphology, clinic, diagnosis of acute deep caries.
33. Methods of isolation of a tooth from saliva. Set for applying a rubber dam: composition, purpose. Applying a rubber dam depending on the clinical situation.
34. The sequence and features of the stages of treatment of acute deep caries in one visit. Therapeutic pastes: groups, composition, properties, mechanism of action, features of preparation and application.
35. Treatment of acute deep caries in two visits. Sequence and features of stages.
36. Pathomorphology, clinic, diagnosis of chronic deep caries.
37. Treatment of chronic deep caries. The sequence of stages and features of treatment.
38. Flowering caries: definition, causes of development, clinical manifestations and diagnosis.
39. The choice of tactics for the preparation of carious cavities, taking into account the individual caries resistance and vitality of the tooth, the properties of filling materials.
40. Treatment of flowering caries. Groups of drugs, features of appointment, dosage.

41. Pathomorphology, clinic and diagnosis of secondary chronic deep caries.
42. Causes and prevention of secondary caries.
43. Non-carious lesions of the teeth. Classification by Patrikeev. Pathomorphology, clinic and diagnosis of non-carious lesions that occur before teething: hypoplasia, hyperplasia, endemic fluorosis. Classification of dental fluorosis by A.K. Nikolyshyn (1989) Pathomorphology, clinic and diagnosis of non-carious lesions that occur after teething: traumatic and chemical lesions.
44. Hyperesthesia of teeth: causes of development, types.
45. Treatment of hyperesthesia: groups of modern desensitizers, composition, properties, methods of use.
46. Pathomorphology, clinic, diagnosis, treatment of wedge-shaped defect.
47. Pathomorphology, clinic, diagnosis, treatment of tooth enamel erosion.
48. Changes in tooth color (discoloration) and methods of their removal.
49. The concept of tooth restoration. Restoration construction planning. Tools and accessories for its carrying out and finishing.
50. Methods and means of analgesia in the treatment of caries.
51. Caries prevention. Definition. Types of prevention. The importance of individual and social prevention.
52. The use of physical methods in the complex therapy of caries: indications, contraindications, mechanism of action, methods.

**The list of theoretical questions for the test from section "Endodontic diseases (pulpitis, periodontitis). Etiology, pathogenesis. Classification. Clinic, diagnosis, treatment, prevention "**

1. Diagnose different forms of etiology, pathomorphological manifestations of acute and chronic inflammation of the pulp, using basic and additional methods of examination.
2. Provide emergency care to a patient with acute purulent pulpitis.
3. To appoint according to indications and to carry out treatment of pulpitis by a method of preservation of vital activity of pulp, using medicinal substances of various groups as a part of medical pastes. Write recipes.
4. To appoint according to indications and to carry out treatment of a pulpitis by a vital amputation method, using medicines of various groups as a part of medical pastes. Write recipes.
5. To appoint according to indications and to carry out treatment of a pulpitis by a vital extirpation method, using medicinal substances of hemostatic, antiseptic action.
6. To appoint according to indications and to carry out treatment of a pulpitis by a devital extirpation method.
7. To appoint according to indications and to carry out treatment of a pulpitis by a devital amputation method, using medicinal substances of various groups as a part of mummifying liquids and pastes. Write recipes.
8. To appoint according to indications and to carry out treatment of a pulpitis by a devital combined method, using medicinal substances of various groups as a part of mummifying liquids and pastes. Write recipes.
9. Carry out filling of canals, differentiatedly choose sealers of different groups for different clinical situations in the treatment of pulpitis.
10. Seal the root canals in the treatment of pulpitis by the methods of the central pin, vertical, cold and warm lateral condensation of gutta-percha.
11. Identify the causes of errors and complications and ways to eliminate them when filling root canals.
12. Diagnose different etiology, pathomorphological manifestations of acute and chronic inflammation of apical periodontitis, using basic and additional methods of examination.
13. To carry out intrasyndrome differential diagnosis of various forms of apical periodontitis.
14. Carry out extrasyndrome differential diagnosis of various forms of apical periodontitis.
15. Carry out X-ray diagnosis of chronic forms of periodontitis.
16. Carry out step-by-step treatment of acute forms of apical periodontitis depending on etiological factors.
17. Provide emergency care to a patient with acute purulent apical periodontitis.
18. To carry out step-by-step treatment of chronic forms of apical periodontitis depending on the etiological factor, using various methods of influence on the apical center of an infection.
19. To appoint and carry out treatment of chronic apical periodontitis in one visit, using modern technologies of processing and filling of the root canal.
20. Prescribe physical methods in the treatment of various forms of periodontitis: intracanal electrophoresis, depophoresis, UHF therapy, laser therapy, fluctuorization, d'arsonvalization.
21. Identify errors in the diagnosis and treatment of periodontitis, manipulate them to eliminate.

**The list of theoretical questions for the exam from section «Periodontal diseases. Etiology, pathogenesis. Classification. Clinic, diagnosis, treatment and prevention ».**

1. Classification of periodontal diseases (MF Danilevsky, (MKH-10). Positive qualities and shortcomings).
2. Frequency of periodontal diseases among different population groups. Determination of the intensity of periodontal lesions by Russel (PI), KPI, WHO index (CPITN).
3. Connection of periodontal disease pathogenetic with the nervous, cardiovascular, endocrine and immune system pathology. The contribution of domestic scientists.
4. Modern understanding of the etiology and pathogenesis of periodontal disease. The role of local and general factors.
5. Criteria for assessing the condition of the periodontium. Hygienic and periodontal indices (Fedorova-Volodkina, Green-Vermillion, PI, RMA, KPI, CPITN).
6. Plaque. Reasons. Tartar. Formation. Effects on periodontal tissues.
7. Basic and auxiliary methods of periodontal disease diagnosis.
8. Laboratory methods of examination of patients with periodontal tissue pathology.
9. Functional methods of examination of patients with periodontal tissue pathology.
10. X-ray diagnosis of patients with periodontal tissue pathology.
11. Errors and complications in the diagnosis of patients with periodontal pathology.
12. Papillitis. Varieties. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention.
13. Catarrhal gingivitis. Etiology, pathogenesis. clinic, diagnostics, differential diagnosis, treatment, prevention.
14. Hypertrophic gingivitis. Etiology, pathogenesis. clinic, diagnostics, differential diagnosis, treatment, prevention.
15. Ulcerative-necrotising gingivitis. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention.
16. Localized periodontitis. Etiology, pathogenesis, diagnosis, differential diagnosis, treatment, prevention.
17. Generalized periodontitis. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention.
18. Periodontosis. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention.
19. General principles of treatment of patients with various periodontal diseases.
20. Therapeutic local interventions. Methods of dental plaque removing: instrumental, hardware, chemical, combined. Advantages and disadvantages of the methods.
21. Medicines and their use in local intervention.
22. Periodontal dressings. Purpose, varieties, methods of application.
23. Curettage of periodontal pockets. Varieties. Methods of conducting. The use of drugs.
24. Orthopedic local interventions. Elimination of traumatic occlusion.
25. Splinting. Indications, types, methods.
26. General treatment of periodontitis. Target. Varieties.
27. Indications. Contraindications of the general therapy usage.
28. General treatment of patients with periodontitis/ Choice of medicines.
29. Groups of drugs, methods of their use. Mechanism of action.
30. Physical methods of treatment of periodontal diseases. Indications, contraindications.
31. Methods of electrotherapy, magnetic and laser therapy, balneotherapy, massage.
32. Errors and complications in the treatment of patients with periodontitis.
33. Prevention of periodontal disease (primary, secondary, tertiary).
34. Personalized prevention of periodontal disease.
35. Oral hygiene products.
36. Organization and equipment of the periodontal office (department).
37. Medical examination of patients with periodontal disease. Principles. Documentation.
38. Medical examination of patients with periodontal disease. Evaluation of effectiveness.

**The list of practical skills for the test from section «Methods of examination of a dental patient.**

**Damage to the hard tissues of the teeth".**

1. To be able to equip a dental office and ensure its functioning in compliance with hygienic requirements and the basics of ergonomics in dentistry.
2. Use safety rules when working with electrical appliances, universal installations and dental chairs, strong drugs, small endodontic instruments.
3. Provide medical care for fainting, collapse, shock, allergic reactions, hypertensive crisis.
4. Conduct a subjective examination of the patient: collect complaints, medical history and life.
5. Carry out the main methods of objective examination: external examination of the patient, examination of the vestibule and the oral cavity itself.
6. Carry out examination of the disease site: examination of the carious cavity, probing, percussion, palpation.
7. Carry out additional methods of examination of the patient: thermodiagnosics, EDI, caries detectors (vital staining), etc.
8. Evaluate the results of auxiliary methods of examination of the patient: thermodiagnosics, EDI, caries detector (vital staining), etc.



9. Evaluate the results of clinical blood and urine tests.
10. Fill in the outpatient card of the dental patient (f. 043/0), the sheet of the daily account of patients (f. 037/0), the diary of the account of work of the dentist (f. 039-2 / 0).
11. Write a referral to the physiotherapy room, for consultation with other specialists, for X-ray examination.
12. To determine the hygienic index according to Fedorov-Volodkina and to assess the state of oral hygiene.
13. To determine the hygiene index according to Green - Vermillion and to assess the state of oral hygiene.
14. To remove plaque and tartar in different ways: mechanical, physical, chemical.
15. Carry out professional oral hygiene.
16. Evaluate the effectiveness of oral hygiene.
17. Diagnose non-carious lesions that occur before teething: hypoplasia, hyperplasia, dental fluorosis, etc.
18. Diagnose non-carious lesions that occur after teething: traumatic lesions, chemical lesions, enamel erosion, hyperesthesia, wedge-shaped defect.
19. Determine the prevalence, intensity and increase in the intensity of caries.
20. Determine the state of enamel resistance (enamel resistance test).
21. Diagnose acute and chronic initial, superficial, secondary, deep caries, using basic and additional methods of examination.
22. To carry out intrasyndrome differential diagnosis of various forms of caries.
23. Diagnose secondary caries of depulped and undepulped teeth, using basic and additional methods of examination.
24. Diagnose flowering caries using basic and additional methods of examination.
25. Assign general treatment of flowering caries.
26. Prescribe and conduct non-surgical treatment of acute primary caries (remineralizing therapy).
27. To appoint and carry out operative treatment of various forms of caries.
28. Perform application anesthesia.
29. Assign and conduct a single-session method of treatment of acute deep caries using odontotropic pastes.
30. To appoint and carry out a two-session method of treatment of acute deep caries with the use of odontotropic pastes.
31. To appoint according to indications physical methods at complex treatment of caries and noncarious defeats of teeth.
32. Prescribe preventive measures and carry out preventive manipulations to prevent caries;
33. Identify errors and complications in the diagnosis and treatment of caries, using basic and additional methods of examination, to eliminate them.

**The list of practical skills for the test from section "Diseases of the endodontic (pulpitis, periodontitis). Etiology, pathogenesis. Classification. Clinic, diagnosis, treatment, prevention".**

1. Diagnose different forms of etiology, pathomorphological manifestations of acute and chronic inflammation of the pulp, using basic and additional methods of examination.
2. Provide emergency care to a patient with acute purulent pulpitis.
3. To appoint according to indications and to carry out treatment of pulpitis by a method of preservation of vital activity of pulp, using medicinal substances of various groups as a part of medical pastes. Write recipes.
4. To appoint according to indications and to carry out treatment of a pulpitis by a vital amputation method, using medicines of various groups as a part of medical pastes. Write recipes.
5. To appoint according to indications and to carry out treatment of a pulpitis by a vital extirpation method, using medicinal substances of hemostatic, antiseptic action.
6. To appoint according to indications and to carry out treatment of a pulpitis by a devital extirpation method.
7. To appoint according to indications and to carry out treatment of a pulpitis by a devital amputation method, using medicinal substances of various groups as a part of mummifying liquids and pastes. Write recipes.
8. To appoint according to indications and to carry out treatment of a pulpitis devitalny by a combined method, using medicinal substances of various groups as a part of mummifying liquids and pastes. Write recipes.
9. Carry out filling of canals, differentiatedly choose sealers of different groups for different clinical situations in the treatment of pulpitis.
10. Seal the root canals in the treatment of pulpitis by the methods of the central pin, vertical, cold and warm lateral condensation of gutta-percha.
11. Identify the causes of errors and complications and ways to eliminate them when filling root canals.
12. Diagnose different forms of etiology, pathomorphological manifestations of acute and chronic inflammation of apical periodontitis, using basic and additional methods of examination.
13. To carry out intrasyndrome differential diagnosis of various forms of apical periodontitis.
14. Carry out out-of-syndrome differential diagnosis of various forms of apical periodontitis.
15. Carry out X-ray diagnosis of chronic forms of periodontitis.
16. Carry out gradual treatment of acute forms of apical periodontitis depending on the etiological factor.
17. Provide emergency care to a patient with acute purulent apical periodontitis.

18. Carry out step-by-step treatment of chronic forms of apical periodontitis depending on the etiological factor, using different methods of exposure to the apical focus of infection.
19. To appoint and carry out treatment of chronic apical periodontitis in one visit, using modern technologies of processing and filling of the root canal.
20. Prescribe physical methods in the treatment of various forms of periodontitis: intracanal electrophoresis, depophoresis, UHF therapy, laser therapy, fluctuation, d'Arsonvalization.
21. Identify errors in the diagnosis and treatment of periodontitis, manipulate them to eliminate.

### **List of practical skills for the exam from section**

#### **"Periodontal disease. Systematics of periodontal diseases. Examination of patients with periodontal tissue pathology"**

1. Be able to work with dental equipment and tools, be able to sterilize them.
2. To draw up the reporting documentation of the dentist, to analyze the quantitative and qualitative indicators of the doctor's work at the therapeutic reception.
3. Conduct a clinical examination of a patient with periodontal tissue pathology, correctly draw up a medical history, make a plan for examination and treatment of the patient.
4. Determine the oral cavity hygienic indices and evaluate them.
5. Determine the indices of PMA, PI, KPI, CPITN, Schiller-Pisarev test, bleeding index and be able to analyze them.
6. Carry out the following additional methods of examination of the patient and be able to evaluate them:  
test named after VI Kulazhenko;  
b. rinsing the mouth according to MA Yasynivsky.
7. Be able to analyze radiographs of teeth, periodontal tissues; rheoparodontograms.
8. To draw up the reporting documentation of the dentist, to analyze the quantitative and qualitative indicators of the doctor's work at the therapeutic reception.
9. Conduct a clinical examination of a patient with periodontal tissue pathology, correctly draw up a medical history, make a plan for examination and treatment of the patient.
10. Determine the hygienic indices of the oral cavity and evaluate them.
11. Determine the indices of PMA, PI, KPI, CPITN, Schiller-Pisarev test, bleeding index and be able to analyze them.
12. Carry out the following additional methods of examination of the patient and be able to evaluate them:  
a. EDI;  
b. test by Kulazhenko;  
c. TER-test
13. Take material for cytological and bacteriological examinations.
14. Be able to analyze radiographs of teeth, periodontal tissues; rheoparodontograms.
15. Analyze the results of cytological, histological, bacteriological examination of the patient, clinical analysis of blood, urine, biochemical analysis of blood for glucose.
16. Carry out treatment of patients with inflammatory diseases of periodontal tissues. Write recipes.
17. Remove dental plaque.
18. Perform selective grinding and alignment of the occlusal surface of the teeth.
19. Carry out irrigation, instillation and application of drugs.
20. Apply medical non-hardening and hardening bandages during the periodontal disease treatment.
21. Perform an autopsy of a periodontal abscess.
22. Perform curettage of periodontal pockets.
23. Perform diathermocoagulation during the periodontal disease and oral mucosa treatment.
24. Carry out intradental electrophoresis, vacuum massage.
25. Prescribe drugs and prescribe physiotherapy.
26. Carry out professional oral hygiene.
27. To give recommendations on a choice of the oral cavity individual hygiene means and items.
28. Have the forms and methods of sanitary-educational work.

The list of practical skills for final certification from section 4 "Diseases of the oral mucosa"

1. Conduct a clinical examination of a patient with pathology of the oral mucosa; correctly draw up a medical history, make a plan for examination and treatment of the patient.
2. Take material for cytological and bacteriological examinations.
3. Analyze the results of cytological, histological, bacteriological examination of the patient, clinical analysis of blood, urine, biochemical analysis of blood for glucose.
4. Perform application, infiltration, conduction anesthesia and electrical anesthesia.
5. Carry out irrigation, instillation and application of drugs.
6. Work with dental equipment and tools, be able to sterilize them.

7. To draw up the reporting documentation of the dentist, to analyze the quantitative and qualitative indicators of the work of the dentist at the therapeutic reception.
8. Prescribe medications and prescribe physiotherapy.
9. Give recommendations for oral hygiene.
10. Determine the hygienic indices of the oral cavity and evaluate them.
11. Carry out the following additional methods of examination of the patient and be able to evaluate them:
  - allergic tests (normal and rotational pre-test).
12. To give recommendations on oral hygiene.
13. Carry out professional oral hygiene.

The list of practical skills for final certification from section 5 "Deepening of clinical thinking of students. Differential diagnosis, modern methods of treatment and prevention of major dental diseases. Medical examination of dental patients "

1. Equip the dental office and ensure its functioning in compliance with the basics of ergonomics in dentistry.
2. Work with dental equipment and tools, be able to sterilize them.
3. To draw up the reporting documentation of the dentist, to analyze the quantitative and qualitative indicators of the work of the dentist at the therapeutic reception.
4. Conduct a clinical examination of a patient with pathology of teeth, periodontal tissues, oral mucosa; correctly draw up a medical history, make a plan for examination and treatment of the patient.
5. Determine the hygienic indices of the oral cavity and evaluate them.
6. Carry out the following additional methods of examination of the patient and be able to evaluate them:
  - EDI;
  - TER;
7. Be able to analyze radiographs of teeth, periodontal tissues; rheoparodontograms.
8. Analyze the results of cytological, histological, bacteriological examination of the patient, clinical analysis of blood and urine, biochemical analysis of blood and urine.
9. Perform application, infiltration, conduction anesthesia.
10. To whiten teeth.
11. Carry out remineralization of hard tissues of teeth.
12. Cover teeth with therapeutic and prophylactic varnishes, gels.
13. Seal the fissures.
14. Prepare carious cavities under various filling materials.
15. To open the cavities of the teeth.
16. Perform amputation and extirpation of the pulp.
17. Apply devitalizing agents in the treatment of pulpitis.
18. Treat inflammation and damage to the pulp by preserving its vital functions.
19. Carry out medical and instrumental treatment of root canals.
20. Perform impregnation, depophoresis, seal root canals (pastes, cements, pins).
21. Close the perforation of the bottom, walls of the carious cavity and the tooth cavity.
22. Apply temporary fillings and airtight bandages in the treatment of caries, pulpitis, periodontitis.
23. Fill the prepared carious cavities of the tooth with cements, amalgams, composite materials.
24. Carry out grinding and polishing of seals from all types of sealing materials.
1. Equip the dental office and ensure its functioning in compliance with the basics of ergonomics in dentistry.
2. To draw up the reporting documentation of the dentist, to analyze the quantitative and qualitative indicators of the doctor's work at the therapeutic reception.
3. Conduct a clinical examination of a patient with pathology of teeth, periodontal tissues, oral mucosa; correctly draw up a medical history, make a plan for examination and treatment of the patient.
4. Determine the hygienic indices of the oral cavity and evaluate them.
5. Determine the indices of PMA, PI, KPI, CPITN, Schiller-Pisarev test, bleeding index and be able to analyze them.
6. Carry out the following additional methods of examination of the patient and be able to evaluate them:
  - EDI;
  - test VI Кулаженка;
  - TER;
  - allergy tests (normal and rotational pre-test).
7. Take material for cytological and bacteriological examinations.
8. Be able to analyze radiographs of teeth, periodontal tissues; rheoparodontograms.
9. Analyze the results of cytological, histological, bacteriological examination of the patient, clinical analysis of blood, urine, biochemical analysis of blood for glucose.
10. Perform application, infiltration, conduction anesthesia and electrical anesthesia.
11. Remove dental plaque.

12. Perform selective grinding and alignment of the occlusal surface of the teeth.
13. Carry out irrigation, instillation and application of drugs and.
14. Apply non-hardening and hardening bandages in the treatment of periodontal disease.
15. Perform diathermocoagulation in the treatment of pulpitis, periodontitis, periodontal disease and oral mucosa.
16. Carry out intradental electrophoresis, vacuum massage.
17. Perform an autopsy of a periodontal abscess.
18. Carry out curettage of periodontal pockets.
19. Provide emergency care to a patient with fainting, collapse, shock.
20. Provide emergency care to a patient with Quincke's edema, anaphylactic shock.
21. Be able to perform artificial respiration and indirect heart massage.
22. Prescribe medications and prescribe physiotherapy.
23. To carry out professional hygiene of an oral cavity.
24. Give recommendations for oral hygiene.
25. Have the forms and methods of sanitary-educational work.

### 3.3. Control questions and tasks for independent work

1. Acute herpetic stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention.
2. Chronic ulcerative stomatitis. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
3. AIDS. Modern methods of diagnosis and treatment.
4. Diphtheria. Etiology, pathogenesis, clinic, diagnosis, treatment and prevention.
5. Changes in the oral mucosa in dermatoses with an autoimmune component. Lupus erythematosus. Tactics of the dentist.
6. Changes in the oral mucosa in dermatoses with an autoimmune component. Pemphigoid.
7. Changes in the mucous membrane of the oral cavity in radiation sickness
8. Precancerous diseases. Prognosis and prevention of precancerous diseases.
9. Etiology and pathogenesis of dental caries.
10. Radiological characteristics of changes in the periodontium according to SA Vindruhu.
11. Modern endodontic tools for cleaning, dilating and filling root canals. ISO standards. Methods of use.
12. Instrumental processing of root canals "Step-back" and "Crown-down" technique.
13. First aid for patients with emergencies (anaphylactic shock, fainting, collapse, hypertensive crisis, acute heart failure). Algorithm of actions.
14. Theoretical foundations of prevention, levels, types and methods of prevention.
15. Medical examination of dental patients.
16. Analysis of quantitative and qualitative indicators of the work of a dentist.

Tasks for independent work: preparation for practical classes - theoretical training and development of practical skills; preparation for certifications - theoretical training and development of practical skills; independent study of topics that are not included in the plan of classroom classes; individual SRH - review of educational and methodical literature, writing essays, conducting research; preparation for writing a medical history.

**3.4. Individual tasks** (the list approved at the meeting of the department with the determination of the number of points for their performance, which can be added as incentives):

#### **Evaluation of individual tasks of applicants**

<b>№</b>	<b>Name of individual tasks</b>	<b>Number of evaluation points</b>
1.	Participation in the competition Olympiad among Ukrainian universities	up to 10 points
2.	Participation in conferences with a report	up to 10 points
3.	Participation in conferences with a poster report	up to 8 points
4.	Participation in conferences (confirmed by a certificate)	up to 2 points
5.	Participation in competitions on professional skills	up to 10 points
6.	Scientific publications (articles)	up to 8 points
7.	Scientific publications (abstracts)	up to 6 points
8.	Analytical review with a multimedia presentation on the topic of the section	up to 6 points
9.	Production of a visual aid (stand, phantom model, etc.)	up to 8 points

The table lists individual tasks (participation with reports in student conferences, profile competitions, preparation of analytical reviews with presentations with plagiarism testing, etc.) with the definition of the number of points for their implementation, which can be added as incentives (not more than 10).

Points for individual tasks are awarded to the student only once as a commission (commission - head of the department, head teacher, group teacher) only if they are successfully completed and defended. In no case may the total amount of points for IPA exceed 120 points.

**3.5. Other incentives** (conditions for accruing additional points for various types of informal and informal activities, which may include conferences, research, participation in surveys, symposia, etc.): decided in each case individually.

### **3.6. Rules for appealing the assessment**

If the student does not agree with the grade obtained in class, he can appeal it. The appeal is assessed in accordance with the provision "On the appeal of the results of the final control of students of the Kharkiv National Medical University", the order of 30.09.2020. №252.

[http://www.knmu.kharkov.ua/index.php?option=com\\_content&view=article&id=1226%3A2013-03-25-12-07-55&catid=4%3A2011-05-04-07-20-12&Itemid=19&lang=uk](http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=1226%3A2013-03-25-12-07-55&catid=4%3A2011-05-04-07-20-12&Itemid=19&lang=uk)

## **4. DISCIPLINE POLICY**

### **Teacher's policy (department)**

#### **Academic expectations from students**

##### Course requirements

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and receive it when you need it.

Students can discuss different tasks, but their performance is strictly individual. You are not allowed to write off, use any kind of software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to attend practical classes.

Curation of patients is possible provided that students have the appropriate form of clothing, a health book with a mark on vaccination against diphtheria, the results of the examination for the stress of immunity to measles (or a mark on vaccination).

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions, please contact the teacher.

Students are expected to attend all classes. If they missed classes, it is necessary to work it out (according to the schedule on the information stand of the department)

Written and homework must be completed completely and on time, if students have questions, you can contact the teacher in person or by e-mail, which the teacher will provide in the first practical lesson.

Active participation during the discussion in the audience, students should be ready to understand the material in detail, ask questions, express their point of view, discuss. During the discussion it is important:

- respect for colleagues,
- tolerance for others and their experience,
- receptivity and impartiality,
- the ability to disagree with the opinion, but to respect the personality of the opponent,
- careful argumentation of his opinion and the courage to change his position under the influence of evidence,
- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,
- mandatory acquaintance with primary sources.

A creative approach in its various manifestations is welcome. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile. Students' participation in research and conferences on this topic is encouraged.

All students of KhNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to define an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. This Regulation is developed

on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Prevention and Counteraction of Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men"; Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to paragraph 1 of Article 4 of the Convention on the Elimination of All Forms of Discrimination against Women; General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights; UN Committee on Economic, Social and Cultural Rights); in the spirit of international mutual understanding, cooperation and peace and education in the spirit of respect for human rights and fundamental freedoms (UNESCO), the Concept of the State Social Program for Equal Rights and Opportunities for Women and Men until 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans' offices, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential about those who report or accuse of discrimination, or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others).

KhNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

### **Occupational safety and health**

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that every higher education seeker should know where the evacuation exit closest to the audience is, where the fire extinguisher is, how to use it, and so on.

### **Behavior in the audience**

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is **allowed**:

- leave the audience for a short time if necessary and with the permission of the teacher;
- drink soft drinks;
- take photos of presentation slides;
- take an active part in the class (see Academic expectations from students).

**forbidden**:

- eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);
- smoking, drinking alcohol and even low-alcohol beverages or drugs;
- use obscene language or use words that offend the honor and dignity of colleagues and faculty;
- gambling;
- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);
- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

## **5. PLAGIARISM AND ACADEMIC INTEGRITY**

**The Department of Therapeutic Dentistry maintains zero tolerance for plagiarism.** Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Observance of academic integrity at the department takes place according to the current legislation:

- Code of Academic Integrity of KhNMU.
- Order №305 of 27.08.19 on the organization of the educational process in KhNMU.
- Order № 165 of 02.07.2020 on measures to develop the system of academic integrity in KhNMU.
- Order № 157 of 27.08.2021 on strengthening measures to comply with the principles of academic integrity in KhNMU.

## 6. RECOMMENDED LITERATURE

### Basic

1. Therapeutic dentistry: Textbook: In 4 volumes. - Vol. 1. Phantom course / MF Danilevsky, A.V. Borisenko, A.M. Politun and others. - K.: Medicine, 2009. - 400 p.
2. Therapeutic dentistry: Textbook: In 4 volumes. - Vol. 2. Caries. Pulpit. Periodontitis. Oral sepsis / N.F. Danilevsky, A.V. Borisenko, A.M. Politun et al. - K.: Medicine, 2010. - 544 p.

### Information resources

1. Electronic resource [[http://dental-ss.org.ua/load/kniga\\_stomatologia/terapevticheskaja/8](http://dental-ss.org.ua/load/kniga_stomatologia/terapevticheskaja/8)]
2. Electronic resource [[http://stomatbook.blogspot.com/p/blog-page\\_14.html](http://stomatbook.blogspot.com/p/blog-page_14.html)]
3. Electronic resource [[http://mirknig.com/knigi/nauka\\_ucheba/1181309066-terapevticheskaya-stomatologiya-uchebnik.html](http://mirknig.com/knigi/nauka_ucheba/1181309066-terapevticheskaya-stomatologiya-uchebnik.html)]

### MOODLE website:

<http://distance.knmu.edu.ua/course/index.php?categoryid=51>

### Repository website:

<http://repo.knmu.edu.ua/handle/123456789/189>

**The procedure for informing about changes in the syllabus:** the necessary changes in the syllabus are approved by the methodical commission of KhNMU on dental problems and published on the website of KhNMU, the website of the Department of Therapeutic Dentistry of KhNMU.