

Ministry of Health of Ukraine
Poltava State Medical University
Department of propaedeutics of therapeutic stomatology

"AGREED"

Guarantor of educational and professional
of the "Dentistry" program

_____ Olga Sheshukova
“ _____ ” _____ 20__ year

"APPROVED"

Chairman of the academic council
of the International Faculty

_____ Oleksandr Lyulka
Minutes of _____ 20__ No.____

SYLLABUS
EDUCATIONAL PRACTICE (CLINICAL TRAINING)
M.1 EDUCATIONAL PRACTICE (CLINICAL TRAINING)
OF THERAPEUTIC DENTISTRY
regulatory discipline

level of higher education

discipline

specialty

educational qualification

professional qualification

educational and professional program

form of education

course and semester of study of the academic

discipline

the second (master's) level of higher
education

22 "Health care"

221 "Dentistry"

master of dentistry

dentist

"Dentistry"

daytime

3rd year - VI semester

3 N course - VI semester

"APPROVED"

at the meeting of the department

propaedeutics of therapeutic dentistry

Chief department _____

Tkachenko I.M.

Minutes from _____ 20__ №__

DATA ABOUT TEACHERS WHO TEACH EDUCATIONAL DISCIPLINE

Surname, first name, patronymic of teachers, academic degree, academic title	Iryna Mykhalivna Tkachenko, doctor of medicine, professor Sydorova A.I., Doctor of Medicine, Associate Professor I. Ya. Marchenko, Doctor of Medicine, Associate Professor Shundryk M.A., Doctor of Medicine, Associate Professor S.A. Pavlenko, Doctor of Medicine, Associate Professor Nazarenko Z.Yu., Doctor of Medicine, Associate Professor Pavlenkova O.V., Doctor of Medicine, Associate Professor L. I. Lyashenko, Doctor of Medicine, assistant Vodoriz Ya.Yu., Doctor of Philosophy, assistant A.M. Dvornyk, doctor of philosophy, assistant N.M. Brailko, assistant
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MAIN CHARACTERISTICS OF THE EDUCATIONAL DISCIPLINE

The program of the educational discipline «Educational practice» (clinical training) is studied for 3 years at the 3rd, 4th and 5th years of study and is structured into 4 modules.

Scope of the academic discipline

For the study of Module 1 "Educational practice (clinical training) in therapeutic dentistry" in the 3rd year of study, the following are allocated:

Number of credits / hours – 4 credits / 120 hours, of which:

Lectures (hours) - none

Practical (hours) – 64 hours

Independent work (hours)a - 56 hours

Module 1 "Educational practice (clinical training) in therapeutic dentistry" in the 3rd year of study consists of 4 blocks of meaningful modules:

Content module 1. Professional oral hygiene: methods of indicating microbial biofilm and removing dental deposits;

Content module 2. Diagnosis and treatment of caries and non-carious lesions of teeth;

Content module 3. Diagnosis and treatment of pulpitis;

Content module 4. Diagnosis and treatment of apical periodontitis.

Policy of educational discipline

An important condition for a successful educational process is the personal observance by each student of higher education of the rules of conduct adopted by the State Medical University and in society. A university graduate, as a future doctor, must have a high level of culture of behavior, behave with dignity, tact, maintain endurance and self-control. A student of higher education must come to classes on time without being late, be dressed in the appropriate medical uniform (white coat or surgical suit, changeable shoes and a medical cap). A student of higher education should not violate the schedule of the educational process, come to class with a synopsis and prepared on the subject of the class, not allow non-fulfillment of the curriculum and individual curriculum without valid reasons. A student of higher education who has missed classes without a valid reason must apply to the dean's office within three days after leaving for classes with an application addressed to the dean for permission to work. During the class, the student of higher education should not leave the classroom without the teacher's permission; using a mobile phone and other means of communication and receiving information during classes without the teacher's permission, engaging in extraneous activities, distracting other students and disturbing the teacher.

When organizing the educational process at PSMU, students of higher education and teachers act in accordance with:

Regulations on the organization of the educational process at the Poltava State Medical University https://www.pdmu.edu.ua/storage/department-npr/docs_links/EXHOB4YrpFJqaqUWjwI3e7GhMA6TcAWDd7yVXYjO.pdf

Regulations on the academic integrity of students of higher education and employees of the Poltava State Medical University and the Code academic integrity at PSMU

https://www.pdmu.edu.ua/storage/n_process_vimo/docs_links/t0jTYbqtNrd5ETCcHiFyMtnnlHbvN0orJOgwYDeS.pdf
https://www.pdmu.edu.ua/storage/n_process_vimo/docs_links/WwK8jif9Fb1Sz yjXCStiqjWVmat8x3J9QFHekKWx.pdf

Rules of internal procedure for students of the Poltava State Medical University (https://www.pdmu.edu.ua/storage/department-npr/docs_links/ycZUUg0fZUvD4QBZ4a18PWhTNJH8AbU6fANHfFAF.pdf).

Regulations on the organization of independent work of students of higher education at the Poltava State Medical University (https://www.pdmu.edu.ua/storage/department-npr/docs_links/pA4e0X3ke7nhuMkZbATEoLhDsEVaJsVrQtqiFjI.pdf)

Regulations on making up for missed classes and unsatisfactory grades by students of higher education of the Poltava State Medical University (https://www.pdmu.edu.ua/storage/department-npr/docs_links/Tw1ZR7sjAmDI8i0uE6kRX5q2F80J6AiwtZ2dvVlQ.pdf) and others

Description of the academic discipline (abstract)

The subject of study of the educational discipline "Educational practice (clinical training) M.1. "Educational practice (clinical training) in therapeutic dentistry" are practical skills for performing dental manipulations, covering the entire range of diagnostic, treatment and preventive work of a therapist-dentist, based on issues of etiology, pathogenesis, clinical manifestations of diseases of teeth and periodontal tissues and methods of their treatment, as well as national and individual preventive measures to prevent such common diseases as caries and its complications.

Pre-requisites and post-requisites of the academic discipline (interdisciplinary connections). Completion of educational practice (clinical training) in therapeutic dentistry for students of the 3rd year of the Faculty of Dentistry is based on previously acquired knowledge of human anatomy, histology, cytology and embryology, pathological anatomy, biological chemistry, microbiology, virology and immunology, clinical pharmacology, pathomorphology, pathophysiology, internal medicine, dermatology, venereology, social medicine, propaedeutics of therapeutic dentistry and therapeutic dentistry (Module 1,2) and integrates with these disciplines.

In turn, the practice forms the basis for the student's further study of the disciplines of professional training - therapeutic dentistry, pediatric dentistry, surgical and orthopedic dentistry, which involves integration with them "vertically" and the formation of skills to apply knowledge in the process of further education and professional activity.

The purpose and tasks of the educational discipline

the purpose educational practice (clinical training) in therapeutic dentistry is available checking, consolidating and using the knowledge acquired by students to acquire practical skills in performing dental manipulations, general and special competencies in accordance with the Standard of Higher Education of Ukraine of the second (master's) level of higher education in the field of knowledge 22 - "Health Care", specialty 221 - "Dentistry".

The main tasks passing educational practice in therapeutic dentistry is:

- to learn to use the principles of prevention of dental diseases and to determine the risk factors of the main dental diseases and their complications.
- carry out measures for the prevention of major dental diseases and carry out an epidemiological analysis of the dental morbidity of the population, identifying risk groups, risk areas, and risk factors. Determine the tactics of examination and primary prevention of healthy persons. Demonstrate and possess practical skills in the prevention of dental diseases.
- using standard technology, on the basis of normative documents, to keep medical documentation regarding the patient and the contingent of the population (ambulatory card of the dental patient, diary of the work performed).
- determine the content of the organization of the work of the therapeutic dental department of the polyclinic, adhere to the medical and protective and sanitary-hygienic regime, demonstrate knowledge of the methods of sterilization of dental instruments and the procedure for their care.

- carry out an examination of a dental patient, apply in practice leading syndromes and symptoms in therapeutic dentistry, substantiate and formulate a preliminary diagnosis; be able to analyze the results of the examination and carry out differential diagnosis, formulate the final diagnosis of the main diseases, determine the nature and principles of treatment of patients in the clinic of therapeutic dentistry, draw up a treatment plan for a patient with caries, its complications and non-cariou lesions depending on the form, course of the disease, age and general condition patient, identify various clinical variants and complications of the most common dental diseases, carry out their primary and secondary prevention.
- to master methods of analgesia in the treatment of odontopathology, preparation of carious cavities according to Black, working with dental instruments and endodontic instruments, methods of working with filling materials of chemical and light hardening, for temporary fillings and root canals.
- master the methods of diagnosis and providing emergency care at a dental appointment at a dentist-therapist.
- evaluate the state of oral hygiene according to hygienic indices and the effectiveness of its implementation. Provide recommendations on oral hygiene, taking into account the individual characteristics of the patient with odontopathology.
- familiarize yourself with the accounting and reporting documentation of a dentist-therapist, write prescriptions and know the requirements for the storage conditions of medical preparations, explain the mechanism of influence during their use.

Competencies and learning outcomes, the formation of which contributes to the discipline (the relationship with the normative content of the training of higher education applicants, formulated in terms of learning outcomes in the Standard).

According to the requirements of the "Standard of Higher Education of Ukraine", educational practice (clinical training) in therapeutic dentistry ensures that students acquire the following competencies:

- *integral*: with the ability to solve complex tasks and problems in the field of health care in the specialty "Dentistry" in professional activity or in the learning process, which involves conducting research and/or implementing innovations and is characterized by the uncertainty of conditions and requirements.
- *general*:
 1. Ability to abstract thinking, analysis and synthesis; the ability to learn and be modernly trained.
 2. Knowledge and understanding of the subject area and understanding of the profession.
 3. Ability to apply knowledge in practical situations.
 4. Ability to communicate in the national language both orally and in writing.

5. Ability to communicate in English. Ability to use international Greek-Latin terms, abbreviations and clichés in professional oral and written communication.
6. Skills in using 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; ability to work autonomously.
9. The ability to identify, pose and solve problems.
10. Ability to choose a communication strategy.
11. Ability to work in a team.
12. Interpersonal skills.
13. The ability to act on the basis of ethical considerations (motives).
14. Skills of performing safe activities.
15. The ability to evaluate and ensure the quality of the work performed.
16. The desire to preserve the environment.
17. The ability to act socially responsibly and civically.
18. The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.

– *special:*

1. The ability to collect medical information about the patient and analyze clinical data.
2. The ability to interpret the results of laboratory and instrumental research.
3. Ability to diagnose: determine preliminary, clinical, final, accompanying diagnosis, emergency conditions.
4. Ability to plan and carry out measures for the prevention of diseases of the organs and tissues of the oral cavity and maxillofacial area.
5. The ability to determine a rational regimen of work, rest, and diet in patients in the treatment of diseases of the organs and tissues of the oral cavity and maxillofacial region.
6. Ability to perform medical and dental manipulations.
7. The ability to treat the main diseases of the organs and tissues of the oral cavity and maxillofacial area.
8. Ability to organize and carry out medical evacuation measures.
9. Ability to determine tactics, methods and provision of emergency medical assistance.
10. The ability to assess the impact of the environment on the state of health of the population (individual, family, population).
11. Ability to maintain normative medical documentation.
12. Processing of state, social and medical information.
13. Ability to organize and carry out rehabilitation measures and care for patients with diseases of the oral cavity and ASHL.
14. The ability to legally support one's own professional activity.
15. The ability to provide pre-medical care according to the protocols of tactical medicine.

Learning outcomes for the discipline according to the educational and professional program "Dentistry":

Program learning outcomes, the formation of which contributes to the discipline.

Educational practice (clinical training) in therapeutic dentistry, as an educational discipline, lays the foundation for the further formation of integrative final program learning results, such as:

1. To isolate and identify the leading clinical symptoms and syndromes, according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of dental disease (according to the list 2.1. Therapeutic stomatology (A, B) of Appendix 1 of the educational and professional program "Dentistry").

<https://www.pdmu.edu.ua/storage/department-npr-opp-stom/files/E1iweCIMoYLZdaPDZUrOsZxIKLoMOBaiA1xhwVo4.pdf>

2. Collect information about the patient's general condition, evaluate the patient's psychomotor and physical development, the condition of the maxillofacial organs, based on the results of laboratory and instrumental studies, evaluate information about the diagnosis.

3. Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, x-ray, functional and/or instrumental) according to list 5 of appendix 1 of the educational and professional program "Dentistry", of patients with diseases of the organs and tissues of the oral cavity and jaw -facial area for differential diagnosis of diseases.

4. To determine the final clinical diagnosis in compliance with the relevant ethical and legal norms, by making a reasoned decision and logical analysis of the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis under the control of the managing physician in the conditions of a health care institution (according to list 2.1. Therapeutic stomatology (A, B) of appendix 1 of the educational and professional program "Dentistry").

5. Establish a diagnosis of urgent conditions under any circumstances (at home, on the street, in a medical institution), in conditions of emergency, martial law, lack of information and limited time (according to list 4 of appendix 1 of the educational and professional program "Dentistry").

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

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

8. Determine the approach, plan, type and principle of treatment of dental disease (according to list 2.1. Therapeutic dentistry (A, B) of Appendix 1 of the educational and professional program "Dentistry") by making a reasoned decision according to existing algorithms and standard schemes.

9. Determine the nature of work, rest and necessary diet in the treatment of dental diseases on the basis of a preliminary or final clinical diagnosis by

making a reasoned decision according to existing algorithms and standard schemes.

10. Determine the tactics of managing a dental patient with somatic pathology (according to list 3) by making a reasoned decision according to existing algorithms and standard schemes.

11. To carry out treatment of basic dental diseases according to existing algorithms and standard schemes under the supervision of a managing physician in the conditions of a health care institution (according to list 2.1. Therapeutic dentistry (A, B) of appendix 1 of the educational and professional program "Dentistry").

13. Determine the tactics of providing emergency medical care, using the recommended algorithms, under any circumstances based on the diagnosis of an emergency condition in a limited time (according to list 4).

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

15. Assess the impact of the environment on the state of health of the population in the conditions of a medical facility according to standard methods.

16. To form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.

18. To be aware of and be guided in one's activities by civil rights, freedoms and duties, to raise the general educational cultural level.

19. To comply with the requirements of ethics, bioethics and deontology in their professional activities.

20. To organize the necessary level of individual safety (own and the persons one cares about) in case of occurrence of typical dangerous situations in the individual field of activity.

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

22. Perform medical dental manipulations on the basis of a preliminary and/or final clinical diagnosis for different segments of the population and in different conditions (according to list 7 (manipulations under numbers 2,6,7,17,18,19,20,22,26,32,33,35,42,43,46,47,48,50,52,56,68) of Appendix 1 educational and professional program "Dentistry").

23. To perform emergency medical aid manipulations using standard schemes, under any circumstances based on the diagnosis of an emergency condition (according to list 4) in conditions of limited time (according to list 6).

24. To develop measures for the organization and integration of the provision of dental care to the population and to conduct marketing of medical, including dental, services in the conditions of the functioning of the health care institution, its division, in a competitive environment.

After completing the study of the discipline "Educational practice (clinical training) in therapeutic dentistry", students of higher education should know:

– clinical features of the anatomical and histological structure of the teeth, periodontium, mucous membrane and organs of the oral cavity;

- classification of dental diseases (caries and its complications, non-cariou lesions of hard tooth tissues);
- basic methods of examination of dental patients;
- clinical signs of odontological diseases;
- basic clinical and biochemical indicators of the norm of biological fluids of the human body;
- principles of differential diagnosis of odontological diseases;
- principles and stages of treatment of dental patients;
- types, levels and measures of prevention of dental diseases.
- the main signs of emergency conditions at a dental appointment and under any circumstances (at home, on the street, in a medical institution);
- tactics, algorithms for providing emergency medical care at a dental appointment and under any circumstances under limited time conditions;

be able:

- conduct an examination of a dental patient;
- to analyze changes in the structure of hard tissues of the tooth, pulp, periodontium, periodontium, mucous membrane of the oral cavity, related to age and pathological conditions;
- substantiate and formulate a preliminary diagnosis;
- carry out differential diagnosis;
- analyze the results of examination of a dental patient;
- determine the clinical diagnosis of the main dental diseases of carious and non-cariou origin and its complications;
- detect and identify manifestations of somatic, infectious diseases in the oral cavity;
- determine the nature and principles of treatment of patients in the clinic of therapeutic dentistry;
- identify various clinical variants and complications of the most common odontological diseases;
- carry out primary and secondary prevention of the most common diseases in the clinic of therapeutic dentistry.
- determine the necessary work and diet regime for the treatment of dental diseases in the clinic of therapeutic dentistry;
- determine the diagnosis of an emergency;
- determine the tactics and provision of emergency medical assistance;
- organize medical evacuation measures.

The thematic plan of the lectures (by modules) with an indication of the main issues considered at the lecture is not provided

Thematic plan of practical classes by modules and content modules with an indication of the main issues considered in the practical class

No.	Topic name	Number
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z/p		hours
Module 1. Educational practice (clinical training) in therapeutic dentistry		
Content module 1. Professional oral hygiene: methods of indicating microbial biofilm and removing dental deposits.		
1.	<p>Organization of work of a dental office of a therapeutic profile. Typical equipment and tools. Hygienic requirements and regulations. Rules of asepsis and antiseptics in dentistry. Medical supervision and control of sterilization. Safety techniques during work in the dental office.</p> <ul style="list-style-type: none"> – organization of providing dental care to the population of Ukraine; – organization of the work of the dental department of the polyclinic and the dental office of a therapeutic profile; – hygienic requirements, standards for the organization of a dental office of a therapeutic profile; – equipping the workplace of a dentist: universal installations and dental chairs; – concepts of ergonomics in dentistry; – medical supervision and control of sterilization; – safety instructions for working in a dental office. 	2
2.	<p>Accounting and reporting documentation of the therapist's dentist. Prevention of emergency conditions in the clinic of therapeutic dentistry (dizziness, loss of consciousness, hypertensive crisis, urticaria, anaphylactic shock). Identifying leading symptoms and providing emergency care. Assessment of the patient's condition.</p> <ul style="list-style-type: none"> – basic forms of medical documentation of a dental therapeutic appointment: medical card of a dental patient 043/O, , rules for their filling; – clinical manifestations and diagnosis of emergency conditions at a dental appointment: fainting, collapse, allergic shock, hypertensive crisis, acute heart failure, etc.; – the algorithm for providing assistance in emergency situations at a dental therapeutic appointment: sets of medications and protocols for providing emergency assistance. 	2
3.	<p>Working with diagnostic equipment of a therapeutic dental office. Interpretation of the results of basic and additional methods of examination of a patient with odontopathology. Algorithm for studying and describing X-ray images.</p> <ul style="list-style-type: none"> - assessment of the state of the affected tooth based on the results of the main examination methods: inspection, probing, horizontal and vertical percussion, palpation of the mucous membrane in the region of the root apex projection; - the method of conducting and interpreting the results of thermodiagnosics; - method of conducting and interpretation of the results of electro-odontological diagnostics (EOD); - method of conducting and interpretation of the results of caries marking (vital staining); 	2

	<ul style="list-style-type: none"> - algorithm for studying and describing X-ray images; - computer tomography study algorithm for the diagnosis of odontopathology; - conducting method and interpretation of the results of luminescence and transillumination diagnostics; - conducting diagnostic tests (test with anesthesia, preparation test) and interpretation of their results; - method of determining trigger zones and surveying the exit points of the peripheral branches of the trigeminal nerve; - determination of ohmic resistance of hard tooth tissues; - evaluation of urine tests, general blood test, blood sugar test, biochemical blood test, pH of oral fluid, etc. 	
4.	<p>Means and methods of dental biofilm indication. Evaluation of the hygienic index. Curation of a patient with dental deposits with filling in an extended medical card of a dental patient*</p> <ul style="list-style-type: none"> - assessment of the type of dental deposits by location, degree of mineralization, time of formation; - the method of microbial biofilm indication using dyes (tablets, two-color Paroplak pads, liquids): interpretation of the result; - method of determining and interpreting the result of the hygienic index according to Fedorov-Volodkina; - method of determination and interpretation of the result of the hygienic index according to Green-Vermillion; - method of evaluating the oral hygiene efficiency index (Podshadley, Haley); - algorithm for curation of a patient with dental deposits; - rules for filling out the medical card of a dental patient with dental deposits. 	2
5.	<p>Conducting professional oral hygiene. Manual scaling: tools and application techniques. Means for chemical removal of dental deposits. Pastes and tools for polishing tooth surfaces. Use of fluoride-containing preparations for caries prevention.</p> <ul style="list-style-type: none"> - the algorithm for conducting professional oral hygiene; - manual removal of mineralized dental deposits using tools for scaling (Langer, Gracie curettes, a set of Zaks hooks, etc.); - use of means for the chemical method of biofilm removal; - the algorithm for polishing all tooth surfaces using end brushes, pastes, plastic polishing strips, etc.; - methods of applying preparations containing fluorine for caries prevention. 	2
6.	<p>Conducting professional oral hygiene.</p> <p>Hardware methods of removing dental deposits. Air-abrasive systems (Air-flow), pneumatic and ultrasonic scalers: indications, work methods.</p> <ul style="list-style-type: none"> - composition of the set, preparation for the use of the Air-flow air-abrasive system; - the algorithm for removing dental deposits using an air-abrasive method (Air flow); - differences in the mechanism of operation of magnetostriction and piezoelectric scaler; - rules for working with a sound, ultrasonic scaler; 	2

	- algorithm for removing dental deposits sound, ultrasonic scaler.	
7.	Clinical conference "Tools and methods of professional oral hygiene" **	2
Content module 2. Diagnosis and treatment of caries and non-carious lesions of teeth.		
8.	<p>Examination of the patient and diagnosis of dental caries. Stage 1 caries management: assessment of caries risk factors and caries protection by the American Dental Association (ADA), CAMBRA, and Cariogram.</p> <ul style="list-style-type: none"> - algorithm for managing a patient with caries according to the 4D cycle; - assessment and analysis of caries risk factors (CRF) and caries protection in healthy and caries patients according to the ADA (Appendix 1 to the Standard of Medical Care "Dental Caries"); - evaluation and analysis of caries risk factors (CRF) and caries protection in healthy and caries patients according to CAMBRA; - assessment and analysis of caries risk factors (PRK) and protection against caries in healthy and caries patients with filling out Cariogram; - determining the level of caries in the patient according to the degree of risk of caries (Appendix 2 to the Standard of Medical Care "Dental Caries"); - documentation of risk factors and protection in form 043/O; - evaluation of the structural and functional resistance of the hard tissues of the tooth according to the TER test; - conducting and interpreting the results of the KOSHER test. 	2
9.	<p>Examination of the patient and diagnosis of dental caries. 2nd stage of caries management: detection and assessment of caries severity and activity. Comprehensive diagnosis of dental caries with a combination of visual and X-ray assessment of the severity and activity of the carious process. Curation of a patient with active forms of caries with filling in an extended medical card of a dental patient*.</p> <ul style="list-style-type: none"> - objective clinical examination of the patient by the visual-tactile method (examination and probing): evaluation of the surface (integrity, texture), depth of the lesion; - determining the indication for X-ray examination (bitewing x-ray) in the diagnosis of dental caries (Appendix 4 to the Standard of Medical Care "Dental Caries"); - evaluation of the results of additional examination methods carried out according to indications; - a combination of radiographic and clinical signs of caries severity according to ICDAS (Appendix 6 to the Standard of Medical Care "Dental Caries"); - use of a dental caries diagnostic scheme that combines visual and X-ray evaluation (Appendix 3 to the Standard of Medical Care "Dental Caries"); - determination of crown caries activity according to ICDAS (Appendix 7 to the Standard of Medical Care "Dental Caries"); - determination of the severity of caries taking into account the activity of the lesion (Appendix 5 to the Standard of Medical Care "Dental Caries"); - determining the severity of root caries according to ICDAS (Appendix 8 	2

	<p>to the Standard of Medical Care "Dental Caries");</p> <ul style="list-style-type: none"> - carrying out intra-syndromic and extra-syndromic differential diagnosis of various forms of caries; - establishing a clinical diagnosis; <p>curation of a patient with active forms of caries with filling in an extended medical chart of a dental patient*.</p>	
10.	<p>The 3rd stage of caries management: determination of the most optimal treatment plan for the carious lesion, taking into account the condition of the patient and the tooth. Assessment of the complexity of caries treatment. Drawing up an individual treatment plan: at the level of the patient and the tooth</p> <ul style="list-style-type: none"> - selection of an individual plan for the prevention and treatment of caries according to the block diagram of the patient's treatment plan (Appendix 9 to the Standard of Medical Care "Dental Caries"); - determining the assessment of the complexity of caries treatment (Dental caries. Evidence-based clinical guideline. Appendix 10); - development of a patient-level prevention and control plan for tooth preservation (Dental caries. Evidence-based clinical guideline. Appendix 11); - a clinical decision-making model for caries treatment (Dental caries. An evidence-based clinical guideline. Appendix 17). 	2
11.	<p>The 4th stage of caries management: development of a scheme of prevention and control and treatment of a patient with initial caries (ACDAS 1, 2). Scheme of non-invasive treatment of cavitated and non-cavitated carious lesions of tooth crowns and roots.</p> <ul style="list-style-type: none"> - justification of the possibility of a conservative method of caries treatment. - clinical scheme of non-invasive treatment of carious lesions of permanent teeth without and with carious cavities (Dental caries. Evidence-based clinical guideline. Appendix 12); - caries management using risk assessment according to CAMBRA (Dental caries. Evidence-based clinical guideline. Appendix 18); - local application of fluoride for the treatment of active initial (non-cavitated) caries; - use of electrophoresis for the treatment of initial caries: remineralizing agents, method of implementation; - technique of resin infiltration with the "Icon" system; - deep fluorination technique according to Knappvost; - the technique of using "Remodent" for non-invasive treatment of caries; - drawing up an individual caries prevention scheme depending on the risk group. 	2
12.	<p>Development of a scheme of prevention and control and treatment of a patient with medium caries: sequence of stages and features of implementation. Approaches to the removal of carious tissues. Clinical algorithm for the use of filling materials for direct restoration of teeth. Curation of a patient</p>	

	<p>with inactive forms of caries with filling in an extended medical card of a dental patient*.</p> <ul style="list-style-type: none"> - stages of invasive treatment of moderately active caries; - microinvasive techniques for preparing carious cavities for the treatment of cavitated active medium caries ACIDAS 3; - a clinical model of caries treatment decision-making(Dental caries. Evidence-based clinical guideline. Appendix 17); - clinical scheme of approaches to the removal of carious tissues in the treatment of vital permanent teeth that were not treated endodontically (Dental caries. Evidence-based clinical guideline. Appendix 15); - determination of approaches to the removal of carious tissues and the clinical picture of carious lesions(Dental caries. Evidence-based clinical guideline. Appendix 13); - clinical algorithm for the use of filling materials for the direct restoration of vital, endodontically untreated permanent teeth(Dental caries. Evidence-based clinical guideline. Appendix 16); - curation of a patient with inactive forms of caries with filling in an extended medical card of a dental patient. 	
13.	<p>Development of a scheme of prevention and control and treatment of a patient with deep caries: sequence of stages and features of implementation. One-stage and two-stage methods of treatment of active deep caries. Medical pads: groups, properties, mechanism of action, indications for use.</p> <ul style="list-style-type: none"> - a clinical decision-making model for caries treatment (Dental caries. Evidence-based clinical guideline. Appendix 17); - stages of the one-session method of treatment of active deep caries; - medical pads to protect and stimulate the pulp in the treatment of active deep aries: groups, properties, mechanism of action, application features; - stages of the two-session method of treatment of active deep caries using 2-stage removal of carious tissues; - generalization of clinical recommendations and provisions of effective dental care regarding the removal of carious tissues and the use of direct restorative materials in the treatment of carious lesions in living, endodontically treated permanent teeth (Dental caries. Evidence-based clinical guidelines. Appendix 14); - clinical algorithm for the use of filling materials for the direct restoration of vital, endodontically untreated permanent teeth (Dental caries. Evidence-based clinical guideline. Appendix 16). 	
14.	<p>Examination of the patient and diagnosis of non-carious lesions that occurred during the follicular development of the tooth.</p> <ul style="list-style-type: none"> - examination of the patient and diagnosis of enamel hypoplasia; - examination of the patient and diagnosis of enamel hyperplasia; - examination of the patient and diagnosis of dental fluorosis; - diagnosis of abnormalities in the development and eruption of teeth (Getchenson's, Fournier's, Pflueger's teeth, etc.); - intrasyndromic differential diagnosis of non-carious lesions that arose during the follicular development of the tooth; - non-syndromic differential diagnosis of non-carious lesions that arose 	

	during the follicular development of a tooth with various forms of caries.	
15.	<p>Examination of the patient and diagnosis of non-carious lesions that occurred after tooth eruption. Changes in the color of teeth (discoloration) and methods of their elimination. Curation of a patient with non-carious lesions of the teeth with filling in the expanded medical card of the dental patient*.</p> <ul style="list-style-type: none"> - examination of the patient and diagnosis of wedge-shaped defect; - examination of the patient and diagnosis of enamel erosion; - examination of the patient and diagnosis of increased tooth wear; - examination of the patient and diagnosis of chemical necrosis of hard tissues of the tooth; - examination of the patient and diagnosis of dental injuries. - intra- and extra-syndromic diagnosis of caries and non-carious lesions of teeth that occurred after teething; - filling out the extended medical card of the dental patient with non-carious lesions of the teeth. 	2
16.	<p>Treatment of patients with non-carious lesions of the teeth: stages, justification of the choice of filling materials. Modern desensitizers for the treatment of hyperesthesia of hard dental tissues: groups, properties.</p> <ul style="list-style-type: none"> - the choice of the method of treatment of patients with non-carious lesions of the teeth depending on the etiopathogenetic factor, type, degree and depth of the lesion; - groups of drugs for the treatment of hyperesthesia, their properties; - methods of administration of medicinal substances for the treatment of hyperesthesia, - rationale for choosing filling materials for direct restoration. 	
17.	Clinical conference (analysis of clinical cases) "Modern trends in the diagnosis and treatment of carious and non-carious dental lesions" **	2
Content module 3. Diagnosis and treatment of pulpitis		
18.	<p>Examination of the patient and diagnosis of reversed forms of pulpitis (acute traumatic pulpitis, hyperemia of the pulp, limited pulpitis). Curation of a patient with reversible forms of pulpitis with filling in an extended medical chart of a dental patient*.</p> <ul style="list-style-type: none"> - subjective examination (interview) of a patient with reversible forms of pulpitis: characteristics of the pain syndrome, clarification of the anamnesis of the disease; - objective clinical examination of a patient with reversible forms of pulpitis; - intrasyndromic differential diagnosis of reversible forms of pulpitis; - non-syndromic differential diagnosis of reversible forms of pulpitis; - curation of a patient with reversible forms of pulpitis with filling in an extended medical card of a dental patient*. 	2
19.	Treatment of a patient with pulpitis by the method of pulp preservation: sequence and features of stages, errors and possible complications. Medicinal pastes: groups, properties, features of use.	2

	<ul style="list-style-type: none"> - rationale for choosing a biological method of treating pulpitis; - sequence of stages of biological treatment; - choosing a method of analgesia in the treatment of pulpitis biological method; - rationale for the choice of anesthetics for pain relief; - prevention of possible complications during anesthesia; - justification of the choice of medical pads for the biological method of treatment of pulpitis; - peculiarities of preparation, application, duration of use of medical pads depending on the form of pulpitis. 	
20.	<p>Treatment of a patient with pulpitis by the method of vital amputation: sequence and features of stages, errors and possible complications.</p> <ul style="list-style-type: none"> - rationale for choosing the vital amputation method for the treatment of pulpitis; - the sequence of treatment stages by the method of welcome amputation; - the choice of the method of analgesia in the treatment of pulpitis by the method of welcome amputation; - rationale for the choice of anesthetics for pain relief; - prevention of possible complications during anesthesia; - use of a rubber dam to isolate the operating field; - preparation of the carious cavity (trepanation, filling removal) and opening of the tooth cavity of different groups; - selection of means to stop bleeding; - medicinal products for antiseptic treatment of the tooth cavity in the case of salutary amputation; - justification for the choice of medical pads for applying the pulp to the stump; - the sequence of restoration of the tooth crown defect with filling materials of different groups. 	
21.	<p>Examination of the patient and diagnosis of symptomatic irreversible forms of pulpitis (acute diffuse and purulent pulpitis). Curation of a patient with irreversible forms of pulpitis with filling in an extended medical card of a dental patient*.</p> <ul style="list-style-type: none"> - subjective examination (survey) of a patient with irreversible forms of symptomatic pulpitis: description of the pain syndrome, clarification of the anamnesis of the disease; - objective clinical examination of a patient with irreversible forms of symptomatic pulpitis; - intrasyndromic differential diagnosis of irreversible forms of pulpitis; - non-syndromic differential diagnosis of irreversible forms of pulpitis; - treatment of a patient with irreversible forms of symptomatic pulpitis with filling in an extended medical card of a dental patient*. 	2
22.	<p>Treatment of a patient with pulpitis by the method of welcome extirpation: the sequence and features of the stages, errors and possible complications.</p> <ul style="list-style-type: none"> - rationale for choosing the vital extirpation method for the treatment of pulpitis; - sequence of stages of treatment by the living room method of expiration; - choosing a method and carrying out analgesia in the treatment of 	2

	<p>pulpitis by the method of congratulatory extirpation;</p> <ul style="list-style-type: none"> - overlaying a cofferdam to isolate the operating field; - preparation of the carious cavity (trepanation, filling removal) and opening of the tooth cavity; - searchmouth of root canals by various methods; - use of medicinal substances with antiseptic and hemostatic effect; - carrying out instrumental treatment of root canals with hand tools; - choicesealer when sealing root canals; - filling of root canals using the central pin method and lateral condensation of gutta-percha; - assessment of radiological quality control of root canal filling; - effectiveness and complications in the treatment of pulpitis by the method of vital extirpation. - the sequence of restoration of the tooth crown defect with filling materials of different groups. 	
23.	<p>Examination of the patient and diagnosis of chronic forms of pulpitis (fibrous, hypertrophic, gangrenous, concrementous). Exacerbation of chronic pulpitis: causes, clinic, diagnosis.</p> <ul style="list-style-type: none"> - subjective examination (interview) of a patient with chronic forms of pulpitis: description of the pain syndrome, clarification of the anamnesis of the disease; - objective clinical examination of a patient with chronic forms of pulpitis; - intrasyndromic differential diagnosis of chronic forms of pulpitis; - non-syndromic differential diagnosis of chronic forms of pulpitis; - treatment of a patient with chronic forms of pulpitis with filling in an extended medical card of a dental patient*. 	2
24.	<p>Treatment of a patient with pulpitis by the method of devital extirpation: sequence and features of stages, errors and possible complications.</p> <ul style="list-style-type: none"> - rationale for choosing the devital extirpation method for the treatment of pulpitis; - the sequence of stages of endodontic treatment by the devital method expiration; - regulations application of devitalizing pastes, possible complications; - carrying out instrumental processing of root canals with rotary instruments; - sealing of root canals by the method of condensation of heated gutta-percha (Thermofil system, continuous wave technique, etc.); - assessment of radiological quality control of root canal filling; - effectiveness and complications in the treatment of pulpitis by devital extirpation. 	2
25.	<p>Examination of the patient and diagnosis of exacerbation of chronic forms of pulpitis</p> <ul style="list-style-type: none"> - subjective examination (interview) of a patient with an exacerbation of chronic fibrous pulpitis: characteristics of the pain syndrome, clarifying the anamnesis of the disease; - subjective examination (survey) of a patient with an exacerbation of chronic gangrenous pulpitis: characteristics of the pain syndrome, clarifying the anamnesis of the disease; - subjective examination (interview) of a patient with an exacerbation of 	

	<p>chronic calcifying pulpitis: characteristics of the pain syndrome, clarifying the anamnesis of the disease;</p> <ul style="list-style-type: none"> - objective clinical examination of a patient with exacerbation of chronic forms of pulpitis; - intrasyndromic differential diagnosis of acute and aggravated forms of pulpitis; - non-syndromic differential diagnosis of exacerbation of chronic forms of pulpitis; 	
26.	<p>Treatment of a patient with pulpitis by the method of devital amputation and the combined method: the sequence and features of the stages, errors and possible complications. Effectiveness of methods.</p> <ul style="list-style-type: none"> - rationale for choosing devital amputation and combined methods for the treatment of pulpitis; - the sequence of stages of endodontic treatment by the devital method amputations; - overlay rules devitalizing pastes, possible complications; - the sequence of stages of endodontic treatment by devital combined method; - the choice of sealer for sealing poorly accessible root canals; - mummification of the pulp in impenetrable root canals; - assessment of effectiveness and prevention of complications in the treatment of pulpitis by devital amputation and combined methods. 	
27.	Clinical conference (analysis of clinical cases) "Errors and complications in the diagnosis and treatment of pulpitis" **	2
	Content module 4. Diagnosis and treatment of periodontitis.	
28.	<p>Examination of the patient and diagnosis of acute forms of apical periodontitis of infectious and non-infectious origin. Treatment of a patient with acute forms of apical periodontitis with filling in an extended medical card of a dental patient*.</p> <ul style="list-style-type: none"> - subjective examination (survey) of a patient with acute forms of apical periodontitis of infectious origin: characteristics of the pain syndrome, clarifying the anamnesis of the disease; - subjective examination (interview) of a patient with acute forms of apical periodontitis of non-infectious origin: characteristics of the pain syndrome, clarifying the anamnesis of the disease; - objective clinical examination of a patient with acute forms of apical periodontitis; - intrasyndromic differential diagnosis of acute forms of periodontitis; - non-syndromic differential diagnosis of acute forms of periodontitis; - treatment of a patient with acute forms of apical periodontitis with filling in an extended medical chart of a dental patient*. 	2
29.	<p>Examination of the patient and diagnosis of asymptomatic (chronic) forms of apical periodontitis. X-ray signs of pathological processes of hard tissues of the tooth and the periapical area. Treatment of a patient with chronic forms of apical periodontitis with filling in an extended medical chart of a dental patient*.</p> <ul style="list-style-type: none"> - subjective examination (interview) of a patient with chronic forms of 	2

	<p>apical periodontitis: typical complaints, clarifying the anamnesis of the disease;</p> <ul style="list-style-type: none"> - objective clinical examination of a patient with chronic forms of apical periodontitis; - X-ray signs of osteoporosis, osteosclerosis, destruction of bone tissue, hypercementosis; - assessment and description of X-ray images of patients with various forms of apical periodontitis; - analysis and evaluation of computer tomography of the jaws in the diagnosis of periodontitis; - intrasyndromic differential diagnosis of chronic forms of periodontitis; - non-syndromic differential diagnosis of chronic forms of periodontitis. 	
30.	<p>Examination of the patient and diagnosis of exacerbation of chronic forms of apical periodontitis, apical periodontitis complicated by periostitis.</p> <ul style="list-style-type: none"> - subjective examination (interview) of a patient with exacerbation of chronic forms of apical periodontitis: typical complaints, clarifying the anamnesis of the disease; - objective clinical examination of a patient with exacerbation of chronic forms of apical periodontitis; - diagnosis of complications of periodontitis with periostitis; - evaluation and description of X-ray images of patients with exacerbation of apical periodontitis; - analysis and assessment of computed tomography to assess the condition of teeth and periapical tissues; - intrasyndromic differential diagnosis of exacerbation of chronic forms of periodontitis; - non-syndromic differential diagnosis of exacerbation of chronic forms of periodontitis. 	2
31.	<p>Differences in endodontic treatment of various forms of apical periodontitis. Methods of influencing the post-apical focus of infection and stimulation of osteogenesis.</p> <ul style="list-style-type: none"> - features of staged treatment of acute forms of apical periodontitis of infectious origin; - providing emergency care to a patient with acute purulent apical periodontitis and acute forms of periodontitis; - conducting antidote therapy of acute drug-induced periodontitis; - the choice of treatment tactics for acute traumatic periodontitis depending on the type of injury; - methods of influencing the post-apical focus of infection and stimulation of osteogenesis in destructive forms of periodontitis; - use of non-hardening pastes for temporary sealing of root canals; - prescription of physiotherapeutic methods in the complex treatment of apical periodontitis; - features of filling root canals in the treatment of periodontitis; - assessment of effectiveness and prevention of complications in the treatment of periodontitis; - choosing an option and carrying out the restoration of the tooth crown after endodontic treatment. 	2
24.	<p>Clinical conference (analysis of clinical cases) "Modern trends in endodontic treatment of various forms of apical</p>	2

	periodontitis" **. Protection of practice.	
	Together	48

*Note: tasks for curation of patients with dental diseases for writing extended medical records of a dental patient are highlighted in italics. Additional 2 hours of independent work are allocated for their registration.

**Note: topics for which a positive assessment must be received.

Independent work

Independent work of students involves:

- Preparation for practical classes
- Filling out extended medical records of the dental patient.
- Preparation for clinical conferences

Individual tasks

1. Creation of presentations for speaking at clinical conferences on:
 - diagnosis and treatment of diseases of hard tooth tissues of carious and non-carious origin, endodontic diseases;
 - differential diagnosis of dental diseases in the clinic of therapeutic dentistry.
2. Preparation of scientific student papers and reports at scientific student conferences.
4. Participation in professional student Olympiads in the discipline.
5. Participation in competitions of professional skill.

System of current and final control

Evaluation of educational activities of university graduates education includes input, current and final control of knowledge, skills and abilities. At the same time, they are used standardized generalized criteria for evaluating the knowledge of higher education seekers (table 1).

Table 1. Standardized generalized criteria for evaluating knowledge students of higher education at PDMU

For 4-point scale	Assessment in ECTS	Evaluation criteria
5 (excellent)	A	The student of education shows special creative abilities, knows how to acquire knowledge independently, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to make decisions in non-standard situations, convincingly argues answers, independently reveals his own gifts and inclinations, possesses at least 90 % of knowledge on the topic both during the survey and all types of control.
4 (good)	B	The learner is fluent in the studied amount of material, applies it in practice, freely solves

		exercises and problems in standardized situations, independently corrects errors, the number of which is insignificant, possesses at least 85% knowledge of the topic as during the survey, and all types of control .
	C	The student of education knows how to compare, generalize, systematize information under the guidance of a scientific and pedagogical worker, in general, independently apply it in practice, control his own activities; correct mistakes, including significant ones, choose arguments to support opinions, possess at least 75% of knowledge on the topic both during the survey and all types of control.
3 (satisfactory)	D	The student reproduces a significant part of the theoretical material, demonstrates knowledge and understanding of the main provisions with the help of a scientific and pedagogical worker, can analyze the educational material, correct errors, among which there are a significant number of significant ones, possesses at least 65% knowledge of the topic as during the survey, and all types of control.
	E	The learner owns educational material at a level higher than the initial one, reproduces a significant part of it at the reproductive level. has at least 60% knowledge on the topic both during the survey and all types of control.
2 (unsatisfactory)	FX	The learner owns the material at the level of individual fragments that make up a small part of the material, has less than 60% knowledge of the topic both during the survey and all types of control.
	F	The learner possesses the material at the level of elementary recognition and reproduction of individual facts, elements, possesses less than 60% of knowledge on the topic during the survey, and all types of control.

Evaluation of current educational activities is carried out by scientific and pedagogical staff of the department during practical classes. The main purpose of current control is to provide feedback between a scientific and pedagogical worker and a student of higher education in the process of learning and formation of educational motivation of students of higher education. The information obtained during the current control is used both by the scientific and

pedagogical worker - to adjust the technologies, methods and means of education, and by the students of higher education - to plan their independent work. Current control is carried out in the form of an oral survey, solving tests and situational tasks, evaluating the performance of manipulations, evaluating the performances of higher education applicants when discussing issues at clinical conferences, etc. Upon completion of studying the topics of the module, the average arithmetic value of the assessment is calculated and converted into points according to the table. 2.

Table No. 2. Unified table of correspondence of points for current academic performance, points for PMK, exam, and traditional four-point evaluation.

Average score for current academic performance (A)	Points for current success in the module (A * 24)	Points for PMK from the module (A*16)	Points for the module and/or exam (A*24 + A*16)	Category ECTS	By 4-point scale
2	48	32	80	F FX	2 Unsatisfactorily
2.1	50	34	84		
2.15	52	34	86		
2,2	53	35	88		
2.25	54	36	90		
2,3	55	37	92		
2.35	56	38	94		
2.4	58	38	96		
2.45	59	39	98		
2.5	60	40	100		
2.55	61	41	102		
2.6	62	42	104		
2.65	64	42	106		
2.7	65	43	108		
2.75	66	44	110		
2.8	67	45	112		
2.85	68	46	114		
2.9	70	46	116		
2.95	71	47	118		
3	72	50	122	E	3 satisfactorily
3.05	73	50	123		
3.1	74	50	124		
3.15	76	50	126		
3.2	77	51	128		
3.25	78	52	130		
3.3	79	53	132		
3.35	80	54	134	D	

3,4	82	54	136		
3.45	83	55	138		
3.5	84	56	140	C	4 good
3.55	85	57	142		
3.6	86	58	144		
3.65	88	58	146		
3.7	89	59	148		
3.75	90	60	150		
3.8	91	61	152		
3.85	92	62	154		
3.9	94	62	156		
3.95	95	63	158		
4	96	64	160	B	
4.05	97	65	162		
4.1	98	66	164		
4.15	100	66	166		
4.2	101	67	168		
4.25	102	68	170		
4.3	103	69	172		
4.35	104	70	174		
4.4	106	70	176		
4.45	107	71	178		
4.5	108	72	180	A	5 perfectly
4.55	109	73	182		
4.6	110	74	184		
4.65	112	74	186		
4.7	113	75	188		
4.75	114	76	190		
4.8	115	77	192		
4.85	116	78	194		
4.9	118	78	196		
4.95	119	79	198		
5	120	80	200		

The reasons for failure to study the module may be as follows:

- a) the student of higher education has unworked absences;
 - b) the student of higher education attended all classes, but did not score the minimum number of points for the current educational activity;
- the student of higher education attended all practical classes, scored the minimum number of points for the current educational activity, but did not properly draw up the medical cards of the provided dental patients, did not submit a report on passing the practice.

The student of higher education has the right to retake the module with the permission of the head of the department after eliminating the missed classes and completing the necessary documentation. After rescheduling, the

department informs the dean's office about the liquidation of the debt (absence of "nb", GPA of 3.0 or more). Failure to retake module 1 "Educational practice (clinical training) in therapeutic dentistry" by the student of higher education before the beginning of the new semester is grounds for repeated training or expulsion. With the permission of the rector or the first vice-rector of the academy, an additional deadline for completing (re-compiling) the module can be individually determined for individual students of higher education.

Final semester certification - none

Discipline assessment. The grade for the discipline "Educational Practice (Clinical Training)" is assigned on a traditional (national) 4-point scale based on the average number of points for all modules provided by the discipline program.

The scale for converting the average number of points for all modules provided by the discipline program into a traditional assessment on a 4-point scale of disciplines and for all departments is uniform (table 3).

The grade from the discipline is not converted (is not converted) into ECTS grades.

The grade for the discipline is issued to the student no later than the next working day after the last final module control only if the student of higher education has all enrolled modules.

Table 3. Conversion of the average number of points for all modules provided by the discipline program into a traditional assessment on a 4-point scale

The average number of points for all modules of the discipline	Traditional assessment on a 4-point scale
122 - 139.99	3
140 - 179.99	4
180 - 200	5

A student who has successfully completed all modules while studying the discipline has the right to increase the grade on the traditional 4-point scale and the ECTS grade of the discipline only with the permission of the rector or the first vice-rector only in the final year.

Teaching methods

When studying module 1 "Educational practice (clinical training) in therapeutic dentistry" the following teaching methods are used:

- verbal (explanation, story, conversation, instruction);
- visual (observation, illustration, demonstration);
- practical (various types of exercises, experiments, practices).
- explanatory-illustrative or information-receptive, which involve the presentation of ready-made information by the teacher and its assimilation by students;
- reproductive, which is based on the performance of various tasks according to the model;

- the method of problem presentation, which consists in the fact that the teacher poses a problem and solves it himself, demonstrating the contradictions that characterize the learning process, while the students' task is to control the sequence of the presentation of the material, the materiality of the evidence, predicting the teacher's next steps; this MN is implemented by training students in problem situations with the aim of successful preliminary preparation for future work in real conditions of practical medical institutions;
- partially search or heuristic, aimed at mastering individual elements of search activity, for example: the teacher formulates a problem, students - a hypothesis;
- research, the essence of which is the teacher's organization of students' search and creative activity by posing new problems and problematic tasks.

Teaching methods are also used:

- that ensure perception and assimilation of knowledge by students (independent work, instruction, consultation);
- for applying knowledge and acquiring and consolidating skills and abilities (practical classes, control tasks, working in a clinic, conducting practice);
- to check and evaluate knowledge, abilities and skills;
- for encouragement and punishment.

The maximum effectiveness of training is achieved under the condition of a rational (systemic) combination of various methods.

Control methods: oral survey, acquisition of practical skills.

- in connection with the learning process: included and delayed;
- by the time of implementation: preliminary (outgoing) — is conducted immediately before the study and allows to correctly assess the student's initial level of knowledge and plan the study; current — is carried out at each lesson and allows to reveal the level of assimilation of individual elements of the educational material;
- thematic (staged) milestone — is held after completion of a certain stage of training; final - serves to check and evaluate knowledge, abilities and skills in a certain educational discipline.

Forms of current control:

1. Oral survey (frontal, individual, combined), interview.
2. Practical testing of professional skills. It is conducted based on the results of practical work at the end of the class.
3. Test control.
4. Methods of self-assessment and self-control.

Practical test. It is used to assess the mastery of the system of practical professional skills and abilities, and is conducted during practical classes and clinical conferences. Such a check makes it possible to reveal to what extent the Higher Education Applicant has understood the theoretical foundations of these actions and can use them in practice.

Method of self-control. Its essence is the student's conscious regulation of his activities in order to ensure such results that would correspond to the tasks, requirements, norms, rules, and models. The purpose of self-control is to prevent mistakes and correct them. An indicator of the formation of self-control

is the student's awareness of the correctness of the activity plan and its operational composition, that is, the way of implementing this plan.

Self-assessment method. Presupposes an objective assessment by the student of the achieved practical results.

To form the ability to self-control and self-evaluation, the teacher motivates the evaluation, offers the student to evaluate his own work. An effective means is the organization of mutual control, reviewing the works of comrades. At the same time, students of higher education familiarize themselves with the norms and criteria for evaluating knowledge and practical skills. Taking into account the results of self-monitoring and self-assessment of knowledge by the teacher when setting the final grade makes them weighty, has a positive effect on the formation of responsibility for educational work, on the education of honesty, principledness, a sense of self-worth, compliance with the principles of academic integrity.

Methodical support

1. Work program of the educational discipline OK 37 "Educational practice (clinical training)" Module 1 "Educational practice (clinical training) in therapeutic stomatology";
2. Syllabus for students studying discipline OK 37 "Educational practice (clinical training)" Module 1 "Educational practice (clinical training) in therapeutic stomatology";
3. Multimedia presentations or educational cases on the topics of practical classes according to the plan;
4. Theoretical questions and practical tasks to control the assimilation of content modules;
5. Situational problems from the license exam bank "Step 2" for each practical session with algorithms for solving them;
6. List of recommended literature by content modules.

15. Recommended literature

1. Basic literature:

Basic (available in the PSMU library)

1. Danylevskiy M.F., Borysenko A.V., Sidelnikova L.F., Nesyn O.F., Dikova I.G. Therapeutic dentistry. Caries. Pulpit. Periodontitis. Oral sepsis. T.2. - 3rd edition. - Kyiv: VSV Medicine, 2020. - 592 p.
2. Therapeutic stomatology: Textbook for students of the stomatological faculty of higher medical educational institutions of the 4th level of accreditation / Ed. Anatoliy Nikolishina - Ed. 2nd, corrected and supplemented. – Vinnytsia: Nova Kniga, 2012. – 680 p.
3. Therapeutic dentistry: In 4 vol. — T. 2. Caries. Pulpit. Periodontitis. Oral sepsis: Textbook for med. Level III-IV universities. accreditation / Under the editorship A.V. Borysenko - K.: Medicine, 2010. – 560 p.
4. Dental caries. Evidence-based clinical practice. SE "State Expert Center of the Ministry of Health of Ukraine". Kyiv, 2024. – 66 p.
https://www.dec.gov.ua/wpcontent/uploads/2024/05/2024_kn_kariyes_zubiv.pdf

5. Standard of medical care. Dental caries. Order of the Ministry of Health of Ukraine dated May 23, 2024 No. 869. https://www.dec.gov.ua/wp-content/uploads/2024/05/smd_869_23052024.pdf

Auxiliary

1. Algorithms of practical skills in propaedeutics of therapeutic dentistry: a study guide. / I.M. Tkachenko, I.Ya. Marchenko, M.A. Shundryk et al. - Poltava: ASMI LLC, 2020. -172 p. Algorithms of Practical Skills in Propaedeutics of Therapeutic Dentistry / Tkachenko IM, Marchenko IY, Shundrik MA - Poltava: "ASMI", 2021. - 160 p.
2. Batig V.M. Systematized presentation of the content of the educational discipline "Therapeutic Dentistry". Study guide. / V.M. Batig, V. I. Struk. – Chernivtsi, 2016. – 227 p.
3. Bobyriov VM "Pharmacotherapy in dentistry": educational manual. Vinnytsia: Nova Knyha, 2020.
4. Borysenko A.V. Dental diseases: therapeutic stomatology: textbook / A.V. Borysenko, M.Yu. Antonenko, L.V. Lynovytska and others; under the editorship A.V. Borysenko - K.: VSV "Medicine", 2017. - 664 p.
5. Borysenko AV Dental caries. Pulpitis. Apical periodontitis. Oral sepsis / Edited by AVBorysenko: LF Sidelnikova, OFNesun, Zh.I.Rakhniy, IGDikova, Yu.G.Kolenko, LVLynovytska etc.. - O.: Astro, 2015. - 314p.
6. Borysenko AV Operative Dentistry Endodontics in 2 volumes. volume 1. - K.: AUS Medicine Publishing, 2016. - 384 p.
7. Branch medical and economic standard for providing dental care at I, II and III levels: Ambulatory care / [K.M. Kosenko, Yu.M. Bakhurinskyi, V.Ya. Skiba and others]. – Odesa: Astroprint, 2000. – 384 p.
8. Additional examination methods in dentistry: a study guide / Hasiuk N.V., Chernyak V.V., Klitynska V.V. etc. – Ternopil, 2017. – 120 p.
9. Kovalev E.V. Examination of the patient and diagnosis of odontopathology in the clinic of therapeutic dentistry: educational and methodological manual / E.V. Kovalev, I.Ya. Marchenko, M.A. Shundrik – Poltava, 2005. – 124 p.
10. Kovalev E.V. Periodontitis: study guide / E.V. Kovalev, M.A. Shundryk, I.Ya. Marchenko. – Poltava, 2004. – 161 p.
11. Kovalev E.V. Pulpit. Pathomorphology. Clinic. Treatment: education. manual / E.V. Kovalev, V.M. Petrushanko, A.I. Sydorova. – Poltava, 1998. – 119 p.
12. I.S. Mashchenko Treatment and prevention of dental caries: study guide / I.S. Mashchenko, T.P. Tailor. - Dnipropetrovsk: ART-Press, 2003. - 307p.
13. Melnychuk H.M. Practical odontology: a course of lectures on caries and non-carious lesions of teeth, pulpitis and periodontitis: study guide / H.M. Melnychuk, M.M. Rozhko – Ivano-Frankivsk, 2003. – 392 p.
14. Propedeutics of therapeutic stomatology [Text]: textbook. for students fatigue faculty higher education closing Ministry of Health of Ukraine / Marchenko I.Ya., Nazarenko Z.Yu., Pavlenko S.A. etc.; under general ed. I.M. Tkachenko; VDZU "UMSA" - Poltava: LLC "ASMI", 2016. - 439 p.
15. Under the editorship M.M. Rozhko "Dentistry": in 2 books: Book 2.: textbook. Kyiv: Medicine, English, 2018

16. CariesCare practice guide: consensus on evidence into practice. Stefania Martignon, Nigel B. Pitts, Guy Goffn, Marco Mazevet, Gail VA Douglas, J. Tim Newton, Svante Twetman, Christopher Deery, Sophie Doméjean, Anahita Jablonski-Momeni, Avijit Banerjee, Justine Kolker, David Ricketts, Ruth M. Santamaria . British dental journal, volume 227, No. 5, September 13, 2019. - R. 353-362.
17. Aesthetic dentistry. Yearbook (by the authors). - L.: Gal-Dent, 2014.
18. Fejerskov O.. Kidd EM Dental caries. / O. Fejerskov, EM Kidd. - Oxford University Press; 2016. - 208
19. Kidd E. Essentials of Dental Caries. / E. Kidd, O. Fejerskov. - Oxford Univercity Press, 2016. - 208
20. Magne P. Bonded Porcelain Restorations in the Anterior Dentition: A Biomimetic Approach / Pascal Magne, Urs Besler. - Quintessence Publishing Co, Inc; 2013. - 406
21. Manauta J. Layers: An Atlas of Composite Resin Stratification, 1 edition /Jordi Manauta. - Quintessence Publishing Co, Inc; 2013. - 444
22. Ming-yu Li Contemporary Approach to Dental caries / Li Ming-yu. – Rijeka; 2012. - 478
23. SummittJ. Fundamentals of Operative Dentistry: A Contemporary Approach, 4 edition /James Summitt. - Quintessence Publishing Co, Inc, 2013. - 600
24. Pitts N. Detection, Assessment, Diagnosis and Monitoring of Caries. / Nigel Pitts. - Karger, 2016.-376 p.
25. Terry D. Esthetic and Restorative Dentistry: Material Selection & Technique, 2 edition / Douglas A. Terry Willi Geller. - Quintessence Publishing Co, Inc, 2013. - 752
26. Macei Zharov, Kamilo D' archangelo and others - L.: GalDent, 2014. - 336 c.
27. Cohenca N. Disinfection of Root Canal Systems: The Treatment of Apical Periodontitis / Cohenca Nestor. - Wiley-Blackwell, 2014. - 376 p.
28. Hargreaves K. Cohen's Pathways of the Pulp, 11th Edition / Kenneth M. Hargreaves. - Elsevier Canada; 2015. - 928
29. SummittJ. Fundamentals of Operative Dentistry: A Contemporary Approach, 4 edition /James Summitt. - Quintessence Publishing Co, Inc, 2013. - 600
30. Torabinejad M. Endodontics: Principles and Practice, 5 edition /Mahmoud Torabinejad,Ashraf Fouad. - Elsevier Canada, 2014. - 496
31. Nairn Wilson and Stephen Dunne Manual of Clinical Procedures in Dentistry // Wiley-Blackwell. - 2018. - 577 p.
32. F. Schwendicke, Jo Frencken, N. Innes Caries Excavation: Evolution of Treating Cavitated Carious Lesions // Karger. – 2018. -- 190 p.
33. Vimal K Sikri Dental Caries // CBS Publishers & Distributors – 2017. -- 780p.
34. Zhou Xuedong Dental Caries // Springer--- 2016. -- 187 p.
35. Sturdevant's Art and Science of Operative Dentistry / seventh edition // Elsevier – 2019. -- 699 p.

36. Carlos Rocha Gomes Torres Modern Operative Dentistry // Springer - 2020. - 720 p.
37. Pickard's Guide to Minimally Invasive Operative Dentistry / tenth edition // Oxford University Press. - 2015. - 197 p.
38. Bennett T. Amaechi Dental Erosion and Its Clinical Management // Springer. --2015. -- 318 p.
39. Ece Eden Evidence-Based Caries Prevention // Springer. – 2016. --196 p.
40. Edwina Kidd, Ole Fejerskov Essentials of Dental Caries / fourth edition // Oxford University Press. - 2016. - 209 p.
41. Jorge Perdigão Tooth Whitening An Evidence-Based Perspective // Springer. – 2016. -- 268 p.
42. Linda Greenwall Tooth whitening techniques / Second Edition // CRC Press. - 2017. - 367 p.
43. Hargreaves, Harold E. Goodis, Franklin R. Tay Seltzer and Bender's Dental Pulp. Second Edition / edited by Kenneth M. // Quintessence Publishing. – 2012. -- 512 p.
44. Louis H. Berman, Kenneth M. Hargreaves, Ilan Rotstein Cohen's Pathways of the Pulp / Twelfth edition // Elsevier. – 2021. -- 3488 p.
45. Thomas Kvist Apical Periodontitis in Root-Filled Teeth. Endodontic Retreatment and Alternative Approaches // Springer International Publishing. – 2018. -- 140 p.
46. Ilan Rotstein, John I. Ingle Ingle's Endodontics 7 // PMPH-USA. – 2019. -- 1271 p.
47. Mahmoud Torabinejad, Ashraf F. Fouad, Shahrokh Shabahang Endodontics. Principles and Practice / Sixth edition // Elsevier. – 2021. -- 501 p.
48. V. Gopikrishna Grossman's endodontic practice / 14th edition // Wolters Kluwer Health. – 2021. -- 517 p.
49. Nestor Cohenca Disinfection of Root Canal Systems. The Treatment of Apical Periodontitis // John Wiley. -- 2014. -- 371 p.
50. Bobby Patel Endodontic Diagnosis, Pathology, and Treatment Planning. Mastering Clinical Practice // Springer. – 2015. -- 323 p.
51. Bettina Basrani Endodontic Irrigation. Chemical Disinfection of the Root Canal System // Springer. – 2015. -- 325 p.
52. Bettina Basrani Endodontic Radiology / Second Edition // John Wiley. – 2012. -- 446 p.

16. Information resources

- <http://www.nature.com/bdj/journal/v213/n9/abs/sj.bdj.2012.1007.html?foxtrotcallback=true>
- https://www.ncbi.nlm.nih.gov/labs/journals/practic-periodontics-aesthet-dent/?issue=9002247_000012_000008
- http://www.quintpub.com/journals/ejed/journal_contents.php?journal_name=EJED&t=1#.WcqsZdSLSt8
- [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1708-8240](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1708-8240)
- <http://www.scadent.org/node/9>
- <http://eurendodj.com/eng/sayfalar/97/Aims-and-Scope>

- [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2591](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2591)
- [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1747-4477](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1747-4477)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3881297/>
- <http://journals.sbm.ac.ir/iej>
- <http://www.jendodon.com/>
- https://www.researchgate.net/publication/259722825_Pathogenesis_of_Apical_Periodontitis_a_Literature_Review
- http://dental-ss.org.ua/load/kniga_stomatologia_terapecticheskaia/8
- http://stomatbook.blogspot.com/p/blog-page_14.html
- http://nashol.com/2011041354397/propedevtika-stomatologicheskikh_zabolevanii-skorikova-la-volkov-va-bajenova-np.html
- <http://www.booksmed.com/stomatologiya/2393-propedevtika-stomatologicheskikh-zabolevaniy-skorikova.html>
- http://dental-ss.org.ua/load/kniga_stomatologia_terapecticheskaia/8
- http://stomatbook.blogspot.com/p/blog-page_14.html
- <http://www.booksmed.com/stomatologiya/153-terapecticheskaya-stomatologiya-borovskij.html>
- https://discovery.dundee.ac.uk/ws/portalfiles/portal/41496491/Author_Accepted_Manuscript.pdf
- https://www.dec.gov.ua/wpcontent/uploads/2024/05/smd_869_23052024.pdf

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