

MINISTRY OF HEALTH PROTECTION OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of Therapeutic Dentistry

"APPROVED"

Acting vice-rector for scientific and pedagogical work


Eduard BURIACHIVSKYI



September 1, 2024

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE

"SIMULATION DENTISTRY"

Level of higher education: second (master's)

Field of knowledge: 22 "Health care"

Specialty: 221 "Dentistry"

Educational and professional program: Dentistry

2024

The working program of the educational discipline "Simulation Dentistry" is compiled on the basis of the educational and professional program "Dentistry" of training specialists of the second (master's) level of higher education in the specialty 221 "Dentistry" of the field of knowledge 22 "Health care", approved by the Academic Council of ONMedU (protocol No. 10 dated June, 27 2024).

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Protocol No. 1 dated 27.08.2023.

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Agreed with the MEP guarantor

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Approved by the subject cycle methodical commission for dental disciplines of ONMedU
Protocol No. 1 dated 30.08.2024.

The head of the subject cycle methodical commission for dental disciplines of ONMedU

Volodymyr KRYKLYAS

Reviewed and approved at the meeting of the department of

Therapeutic and pediatric dentistry

Protocol No. 1 of "2" september 2024

Head of Department

Oksana Dienha

1. Description of the educational discipline:

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the academic discipline
The total number of: Credits: 7.0 Hours: 210 Content modules: 1	Field of knowledge 22 "Health care"	<i>Full-time education</i>
		<i>Compulsory discipline</i>
	Specialty 221 "Dentistry"	<i>Year of training: 5</i>
		<i>Semester IX, X</i>
	Level of higher education second (master's)	<i>Lectures (0 hours)</i>
		<i>Seminars (0 hours)</i>
		<i>Practical (138 hours)</i>
		<i>Laboratory (0 hours)</i>
		<i>Independent work (72 hours) including individual tasks (0 hours)</i>
		<i>The form of the final control is a differentiated assessment</i>

2. The purpose and tasks of the educational discipline, competences, program learning results.

Purpose: improvement of special (professional) competences acquired during the study of the discipline "Therapeutic Dentistry" by repeating theoretical knowledge and practicing practical skills and abilities by students on phantoms and simulators, namely:

- formation of the required amount of theoretical knowledge by specialty;
- formation of a qualified doctor capable of successfully solving his professional tasks;
- mastering the practical skills of treating dental patients in outpatient polyclinic conditions, forming the professional knowledge and skills of a doctor, for the original management of patients;

- mastering modern technical and auxiliary methods and methods of diagnosis of dental diseases in the necessary volume.

Upon completion, the dentist must possess the following professional competencies:

- the ability and willingness to analyze the problem, the use of tried and tested methods in practice;

- the ability and readiness for logical and reasoned analysis, discussion and polemic, editing of texts of professional content, educational and pedagogical activities, cooperation and conflict resolution;

- the ability and willingness to use management methods, to find and make responsible decisions in the conditions of different opinions and within the framework of one's professional competence;

- the ability and willingness to carry out their activities taking into account the moral and legal norms accepted in society, to comply with the rules of medical ethics, laws and regulations on working with confidential information, to keep medical secrecy.

Tasks of the discipline: To form students' professional skills and skills in performing professional actions for the diagnosis, treatment and prevention of non-carious dental lesions, caries, its complications (pulpitis and periodontitis), periodontal diseases and oral mucosa on simulators, imitators and phantoms.

Competences and learning results, 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 results in the Standard).

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

Integral competence:

The ability to solve typical and complex specialized 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 complexity and uncertainty of conditions and requirements.

General competences (GC):

- GC 3. Ability to apply knowledge in practical activities.
- GC 4. Ability to communicate in the national language both orally and in writing.
- GC 5. Ability to communicate in English.
- GC 6. Skills in using information and communication technologies.
- GC 8. Ability to adapt and act in a new situation.
- GC 9. Ability to identify, pose and solve problems.
- GC 10. Ability to be critical and self-critical.
- GC 11. Ability to work in a team.

Special competences (SC):

- SC 1. Ability to collect medical information about the patient and analyze clinical data.
- SC 2. Ability to interpret the results of laboratory and instrumental research.
- SC3. Ability to diagnose: determine preliminary, clinical, final, accompanying diagnosis, emergency conditions.
- SC4. The ability to plan and carry out measures for the prevention of diseases of the organs and tissues of the oral cavity and maxillofacial area.
- SC6. 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.
- SC7. The ability to determine the management tactics of patients with diseases of the organs and tissues of the oral cavity and maxillofacial region with accompanying somatic diseases.
- SC8. Ability to perform medical and dental manipulations.
- SC9. The ability to treat the main diseases of the organs and tissues of the oral cavity and maxillofacial area.
- SC 13. The ability to assess the impact of the environment on the state of health of the population (individual, family, population).

Program learning outcomes (PLO):

- PLO 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 (according to list 5).
- PLO 3. Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, X-ray, functional and/or instrumental) according to list 5, of 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. 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 medical institution (according to the list 2.1).
- PLO 6. Plan and implement dental disease prevention measures among the population to prevent the spread of dental diseases.
- PLO 7. Analyze the epidemiological situation and carry out mass and individual, general and local drug and non-drug prevention measures for dental diseases.
- PLO 8. Determine the approach, plan, type and principle of treatment of dental disease (according to list 2) by making a reasoned decision according to existing algorithms and standard schemes.
- PLO 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.
- PLO 11. To carry out treatment of basic dental diseases according to existing algorithms and

standard schemes under the control of the head physician in the conditions of a medical institution (according to list 2.1).

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

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

PLO 17. Follow a healthy lifestyle, use self-regulation and self-control techniques.

PLO 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.

PLO 20. To organize the necessary level of individual safety (own and the persons they care about) in case of typical dangerous situations in the individual field of activity

PLO 21. Perform medical manipulations on the basis of a 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. To perform medical stomatological 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).

As a result of studying the academic discipline, the student of higher education must:

Know:

- Organization of dental office work. Functions and duties of medical personnel.
- Issues of ethics and deontology. Issues of ergonomics and safety technology.
- Dental instruments for examination and treatment of teeth, their purpose.
- Classifications of the main dental diseases.
- Clinical methods of diagnosis of the main dental diseases.
- Additional methods of diagnosis of the main dental diseases.
- Etiology and pathogenesis of the main dental diseases.
- Innervation and blood supply of jaws and individual groups of teeth.
- Methods of treatment of the main dental diseases.
- Methods of preventing the main dental diseases.
- Norms of working hours, qualitative and quantitative indicators of a dentist's work.
- Rules for filling out medical documentation.

Be able:

- Analyze the results of clinical examinations of patients with the main dental diseases.
- To analyze the results of additional examinations of patients with basic dental diseases.
- To determine the leading syndromes and symptoms in the clinic of therapeutic stomatology.
- Carry out dental caries treatment on a phantom.
- Carry out treatment of dental caries complications on a phantom.
- Carry out treatment of non-carious lesions of hard dental tissues on a phantom.
- Treat periodontal tissue diseases on a phantom.
- Treatment of diseases of the mucous membrane of the oral cavity on a phantom.
- Conduct differential diagnosis of diseases in the clinic of therapeutic dentistry.
- To formulate a preliminary clinical diagnosis in the clinic of therapeutic dentistry.
- To justify the final diagnosis in the clinic of therapeutic dentistry.
- Identify somatic diseases that require special patient management tactics at a therapeutic appointment.
- Demonstrate the skills of filling out a package of medical documentation at a therapeutic appointment.

3. The content of the educational discipline

The discipline "Simulation dentistry" is structured into 1 content module:

Topic 1. Survey scheme of a dental patient. Scheme of examination of the causative tooth.

Topic 2. Completing the dental patient's medical history.

Topic 3. Interpretation of X-ray data.

- Topic 4.** Description of the orthopantomogram of a dental patient.
- Topic 5.** Diagnostic use of caries detector. Determination of acid resistance of tooth enamel (AR-test).
- Topic 6.** Conducting electric pulp test.
- Topic 7.** Preparation of carious cavities of classes I and V according to Black, taking into account the type of filling material.
- Topic 8.** Preparation of carious cavities of classes II - IV according to Black, taking into account the type of filling material.
- Topic 9.** Performing practical actions on tooth preparation using the Moog Simodont Dental Trainer simulator.
- Topic 10.** Installation of cofferdam.
- Topic 11.** Differential diagnosis of systemic hypoplasia. Carrying out differential diagnosis in case of initial caries.
- Topic 12.** Applying an isolating liner. Applying a light-curing therapeutic liner. Direct and indirect covering of the pulp.
- Topic 13.** Applying an adhesive system when sealing superficial caries under a photopolymer material. Applying a temporary filling made of dentin paste.
- Topic 14.** Treatment of a wedge-shaped defect with the help of GIC.
- Topic 15.** Filling of a carious cavity using a photopolymer material.
- Topic 16.** Sealing of a carious cavity using a chemical hardening composite.
- Topic 17.** Grinding and polishing of fillings made of composite materials.
- Topic 18.** Local anesthesia in the treatment of dental diseases by various methods.
- Topic 19.** Application of devitalizing paste during surgical treatment of pulpitis.
- Topic 20.** Amputation of the pulp of temporary and permanent teeth.
- Topic 21.** Pulp extirpation in chronic gangrenous pulpitis.
- Topic 22.** Determination of the working length of the root canal during endodontic treatment using an apex locator.
- Topic 23.** Instrumental processing of the root canal using the Step-back technique. Irrigation of root canals.
- Topic 24.** Providing first aid for acute forms of periodontitis.
- Topic 25.** Sealing of the root canal with calcium hydroxide using a rotary past instrument.
- Topic 26.** Sealing of the root canal by the central pin method.
- Topic 27.** Installation of a sectional matrix in the treatment of caries class 2 according to Black.
- Topic 28.** Deep fluoridation of teeth. Preventive coating of teeth with fluoride varnish. Covering teeth with therapeutic and preventive varnishes, gels, desensitizers.
- Topic 29.** Determination of the depth of the periodontal pocket. Determination of tooth mobility.
- Topic 30.** Carrying out differential diagnosis of decubitus ulcer.
- Topic 31.** Treatment planning for hypertrophic gingivitis during pregnancy.
- Topic 32.** Conducting professional hygiene of the oral cavity using the instrumental method.
- Topic 33.** Conducting professional hygiene of the oral cavity using the ultrasonic method
- Topic 34.** Teaching the patient about individual hygiene with catarrhal gingivitis.
- Topic 35.** Removal of necrotic plaque in the treatment of ulcerative-necrotic gingivitis.
- Topic 36.** Closed curettage of periodontal pockets.
- Topic 37.** Application of Metrogil-dent gel into the periodontal pocket.
- Topic 38.** Application of chlorophyllipt on the gums in the treatment of catarrhal gingivitis.
- Topic 39.** Preparation and application of hardening dressings for periodontitis.
- Topic 40.** The use of local agents in the treatment of periodontal diseases and MMOC.
- Topic 41.** Training of individual hygiene of a patient with periodontal diseases.
- Topic 42.** Local treatment of chronic recurrent aphthous stomatitis (CRAS).
- Topic 43.** Conducting treatment of chronic mechanical trauma.
- Topic 44.** Conducting the treatment of thermal trauma of MMOC.
- Topic 45.** Treatment of acute herpetic stomatitis.

Topic 46. Differentiated calculation.

4. Structure of the educational discipline

Names of topics	Number of hours					
	In total	including				
		lectures	seminars	practical	laboratory	IWS
Topic 1. Survey scheme of a dental patient. Scheme of examination of the causative tooth.	4			4		
Topic 2. Completing the dental patient's medical history.	6			4		2
Topic 3. Interpretation of X-ray data.	4			4		
Topic 4. Description of the orthopantomogram of a dental patient.	4			4		
Topic 5. Diagnostic use of caries detector. Determination of acid resistance of tooth enamel (AR-test).	4			4		
Topic 6. Conducting electric pulp test.	2			2		
Topic 7. Preparation of carious cavities of classes I and V according to Black, taking into account the type of filling material.	8			8		
Topic 8. Preparation of carious cavities of classes II - IV according to Black, taking into account the type of filling material.	8			8		
Topic 9. Performing practical actions on tooth preparation using the Moog Simodont Dental Trainer simulator.	4			4		
Topic 10. Installation of cofferdam.	4			2		2
Topic 11. Differential diagnosis of systemic hypoplasia. Carrying out differential diagnosis in case of initial caries.	4			4		
Topic 12. Applying an isolating liner. Applying a light-curing therapeutic liner. Direct and indirect covering of the pulp.	8			6		2
Topic 13. Applying an adhesive system when sealing superficial caries under a photopolymer material. Applying a temporary filling made of dentin paste.	4			2		2
Topic 14. Treatment of a wedge-shaped defect with the help of GIC.	4			2		2
Topic 15. Filling of a carious cavity using a photopolymer material.	6			4		2
Topic 16. Sealing of a carious cavity using a chemical hardening composite.	6			2		4
Topic 17. Grinding and polishing of fillings made of composite materials.	4			2		2
Topic 18. Local anesthesia in the treatment of dental diseases by various methods.	4			2		2
Topic 19. Application of devitalizing paste during surgical treatment of pulpitis.	4			2		2

Topic 20. Amputation of the pulp of temporary and permanent teeth.	4			2		2
Topic 21. Pulp extirpation in chronic gangrenous pulpitis..	4			2		2
Topic 22. Determination of the working length of the root canal during endodontic treatment using an apex locator.	6			4		2
Topic 23. Instrumental processing of the root canal using the Step-back technique. Irrigation of root canals.	8			4		4
Topic 24. Providing first aid for acute forms of periodontitis.	4			2		2
Topic 25. Sealing of the root canal with calcium hydroxide using a rotary past instrument.	6			4		2
Topic 26. Sealing of the root canal by the central pin method.	4			2		2
Topic 27. Installation of a sectional matrix in the treatment of caries class 2 according to Black.	4			2		2
Topic 28. Deep fluoridation of teeth. Preventive coating of teeth with fluoride varnish. Covering teeth with therapeutic and preventive varnishes, gels, desensitizers.	6			4		2
Topic 29. Determination of the depth of the periodontal pocket. Determination of tooth mobility.	4			2		2
Topic 30. Carrying out differential diagnosis of decubitus ulcer.	2			2		
Topic 31. Treatment planning for hypertrophic gingivitis during pregnancy.	2			2		
Topic 32. Conducting professional hygiene of the oral cavity using the instrumental method.	4			2		2
Topic 33. Conducting professional hygiene of the oral cavity using the ultrasonic method	6			4		2
Topic 34. Teaching the patient about individual hygiene with catarrhal gingivitis.	4			2		2
Topic 35. Removal of necrotic plaque in the treatment of ulcerative-necrotic gingivitis.	4			2		2
Topic 36. Closed curettage of periodontal pockets.	4			2		2
Topic 37. Application of Metrogil-dent gel into the periodontal pocket.	4			2		2
Topic 38. Application of chlorophyllipt on the gums in the treatment of catarrhal gingivitis.	6			4		2
Topic 39. Preparation and application of hardening dressings for periodontitis.	4			2		2
Topic 40. The use of local agents in the treatment of periodontal diseases and MMOC.	6			4		2

Topic 41. Training of individual hygiene of a patient with periodontal diseases.	4			2		2
Topic 42. Local treatment of chronic recurrent aphthous stomatitis (CRAS).	4			2		2
Topic 43. Conducting treatment of chronic mechanical trauma.	4			2		2
Topic 44. Conducting the treatment of thermal trauma of MMOC.	4			2		2
Topic 45. Treatment of acute herpetic stomatitis.	4			2		2
Topic 46. Differentiated calculation.	2			2		
Total hours	210			138		72

5. Topics for lectures / seminars / practical / laboratory

5.1. Topics for lectures

Lecture classes are not transferred.

5.2. Topics for seminars

Seminar classes are not transferred.

5.3. Topics practical classes:

№	Name topics	Number of hours
1.	Topic 1. Survey scheme of a dental patient. Scheme of examination of the causative tooth.	4
2.	Topic 2. Completing the dental patient's medical history.	4
3.	Topic 3. Interpretation of X-ray data.	4
4.	Topic 4. Description of the orthopantomogram of a dental patient.	4
5.	Topic 5. Diagnostic use of caries detector. Determination of acid resistance of tooth enamel (AR-test).	4
6.	Topic 6. Conducting electric pulp test.	2
7.	Topic 7. Preparation of carious cavities of classes I and V according to Black, taking into account the type of filling material.	8
8.	Topic 8. Preparation of carious cavities of classes II - IV according to Black, taking into account the type of filling material.	8
9.	Topic 9. Performing practical actions on tooth preparation using the Moog Simodont Dental Trainer simulator.	4
10.	Topic 10. Installation of cofferdam.	2
11.	Topic 11. Differential diagnosis of systemic hypoplasia. Carrying out differential diagnosis in case of initial caries.	4
12.	Topic 12. Applying an isolating liner. Applying a light-curing therapeutic liner. Direct and indirect covering of the pulp.	6
13.	Topic 13. Applying an adhesive system when sealing superficial caries under a photopolymer material. Applying a temporary filling made of dentin paste.	2
14.	Topic 14. Treatment of a wedge-shaped defect with the help of GIC.	2
15.	Topic 15. Filling of a carious cavity using a photopolymer material.	4
16.	Topic 16. Sealing of a carious cavity using a chemical hardening composite.	2
17.	Topic 17. Grinding and polishing of fillings made of composite materials.	2
18.	Topic 18. Local anesthesia in the treatment of dental diseases by various methods.	2
19.	Topic 19. Application of devitalizing paste during surgical treatment of pulpitis.	2

20.	Topic 20. Amputation of the pulp of temporary and permanent teeth.	2
21.	Topic 21. Pulp extirpation in chronic gangrenous pulpitis.	2
22.	Topic 22. Determination of the working length of the root canal during endodontic treatment using an apex locator.	4
23.	Topic 23. Instrumental processing of the root canal using the Step-back technique. Irrigation of root canals.	4
24.	Topic 24. Providing first aid for acute forms of periodontitis.	2
25.	Topic 25. Sealing of the root canal with calcium hydroxide using a rotary past instrument.	4
26.	Topic 26. Sealing of the root canal by the central pin method.	2
27.	Topic 27. Installation of a sectional matrix in the treatment of caries class 2 according to Black.	2
28.	Topic 28. Deep fluoridation of teeth. Preventive coating of teeth with fluoride varnish. Covering teeth with therapeutic and preventive varnishes, gels, desensitizers.	4
29.	Topic 29. Determination of the depth of the periodontal pocket. Determination of tooth mobility.	2
30.	Topic 30. Carrying out differential diagnosis of decubitus ulcer.	2
31.	Topic 31. Treatment planning for hypertrophic gingivitis during pregnancy.	2
32.	Topic 32. Conducting professional hygiene of the oral cavity using the instrumental method.	2
33.	Topic 33. Conducting professional hygiene of the oral cavity using the ultrasonic method	4
34.	Topic 34. Teaching the patient about individual hygiene with catarrhal gingivitis.	2
35.	Topic 35. Removal of necrotic plaque in the treatment of ulcerative-necrotic gingivitis.	2
36.	Topic 36. Closed curettage of periodontal pockets.	2
37.	Topic 37. Application of Metrogil-dent gel into the periodontal pocket..	2
38.	Topic 38. Application of chlorophyllipt on the gums in the treatment of catarrhal gingivitis.	4
39.	Topic 39. Preparation and application of hardening dressings for periodontitis.	2
40.	Topic 40. The use of local agents in the treatment of periodontal diseases and MMOC.	4
41.	Topic 41. Training of individual hygiene of a patient with periodontal diseases. Teaching the patient about individual hygiene with catarrhal gingivitis.	2
42.	Topic 42. Local treatment of chronic recurrent aphthous stomatitis (CRAS).	2
43.	Topic 43. Conducting treatment of chronic mechanical trauma.	2
44.	Topic 44. Conducting the treatment of thermal trauma of MMOC.	2
45.	Topic 45. Treatment of acute herpetic stomatitis.	2
46.	Topic 46. Differentiated calculation.	2
	Total	138

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work of a student of higher education

№	Topic name / types of tasks	Number of hours
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1.	Survey scheme of a dental patient. Scheme of examination of the causative tooth.	2
2.	Completing the dental patient's medical history.	2
3.	Conducting electric pulp test	2
4.	Performing practical actions on tooth preparation using the Moog Simodont Dental Trainer simulator.	2
5.	Installation of cofferdam.	2
6.	Differential diagnosis of systemic hypoplasia. Carrying out differential diagnosis in case of initial caries.	4
7.	Applying an isolating liner. Applying a light-curing therapeutic liner. Direct and indirect pulp coating.	2
8.	Applying an adhesive system when sealing surface caries under a photopolymer material. Applying a temporary filling with a dentin paste.	2
9.	Treatment of a wedge-shaped defect with the help of GIC.	2
10.	Filling of a carious cavity using a photopolymer material.	2
11.	Sealing of a carious cavity using a chemical hardening composite.	2
12.	Grinding and polishing of fillings made of composite materials.	2
13.	Local anesthesia in the treatment of dental diseases by various methods.	4
14.	Application of devitalizing paste during surgical treatment of pulpitis.	2
15.	Amputation of the pulp of temporary and permanent teeth.	2
16.	Pulp extirpation in chronic gangrenous pulpitis.	2
17.	Determination of the working length of the root canal during endodontic treatment using an apex locator.	2
18.	Instrumental processing of the root canal using the Step-back technique. Irrigation of root canals.	2
19.	Providing first aid for acute forms of periodontitis.	2
20.	Sealing of the root canal with calcium hydroxide using a rotary past instrument.	2
21.	Sealing of the root canal by the central pin method.	2
22.	Installation of a sectional matrix in the treatment of caries class 2 according to Black.	2
23.	Deep fluoridation of teeth. Preventive coating of teeth with fluoride varnish. Covering teeth with therapeutic and preventive varnishes, gels, desensitizers.	2
24.	Determination of the depth of the periodontal pocket. Determination of tooth mobility.	2
25.	Carrying out differential diagnosis of decubitus ulcer.	2
26.	Treatment planning for hypertrophic gingivitis during pregnancy.	2
27.	Conducting professional hygiene of the oral cavity using the instrumental method.	2
28.	Conducting professional hygiene of the oral cavity using the ultrasonic method	2
29.	Removal of necrotic plaque in the treatment of ulcerative-necrotic gingivitis.	2
30.	Closed curettage of periodontal pockets.	2
31.	Application of chlorophyllipt on the gums in the treatment of catarrhal gingivitis.	2
32.	Introduction of Metrogil-dent gel into the periodontal pocket.	2
33.	Preparation and application of hardening dressings for periodontitis.	2
	Total	72

7. Teaching methods

Practical classes: conversation, business games, practice of patient examination skills on a

simulator, practice of manipulation skills, instruction and practice of skills on phantoms, training exercises on differential diagnosis of the most common dental diseases.

Independent work: independent work with the recommended basic and additional literature, with electronic information resources, independent work with the bank of test tasks KROK-2, independent mastering of the technique of performing manipulations on the phantom, the Moog Simodont Dental Trainer simulator, endoblock (tooth preparation, tooth and root canals filling, instrumental treatment of root canals, etc.)

8. Forms of control and assessment methods (including criteria for evaluating learning outcomes)

Current control: oral survey, testing, assessment of performance of practical skills, assessment of activity in class.

Final control: differentiated assessment.

Evaluation of the current educational activity in a practical session:

1. Evaluation of theoretical knowledge on the subject of the lesson:

- methods: survey, solving a situational clinical problem
- maximum score – 5, minimum score – 3, unsatisfactory score – 2.

2. Evaluation of practical skills and manipulations on the subject of the lesson:

- methods: assessment of the correctness of the performance of practical skills
- maximum score – 5, minimum score – 3, unsatisfactory score – 2.

3. Evaluation of work with the patient on the subject of the lesson:

- methods: assessment of: a) communication skills of communication with the patient, b) correctness of appointment and assessment of laboratory and instrumental studies, c) adherence to the differential diagnosis algorithm, d) substantiation of clinical diagnosis, e) drawing up a treatment plan;
- maximum score – 5, minimum score – 3, unsatisfactory score – 2.

The grade for one practical session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Current evaluation criteria in practical training

Mark	Current evaluation
«5»	The applicant is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the when working on a phantom and interpreting clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
«4»	The applicant has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the when working on a phantom and interpreting clinical, laboratory and instrumental research data with some errors, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
«3»	The acquirer does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of a situational clinical problem, demonstrates practical skills during the when working on a phantom and interpreting clinical, laboratory and instrumental research data with significant errors.
«2»	The acquirer does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the when working on a phantom and interpreting clinical, laboratory and instrumental research data.

The applicant is admitted to the differentiated credit on the condition that the requirements of the educational program are met and if he received at least 3.00 points for the current educational

activity and passed the test control of the "Step-2" tests with at least 90% (50 tasks).

Evaluation of learning results during the final control

The content of the evaluated activity	Кількість балів
Answers to theoretical questions.	2
Practical task according to the OSKI type.	3

Evaluation of the results of the students' training during the final control - differentiated assessment

Mark	Criteria for evaluating
Well	The student correctly, accurately and completely completed all the tasks of the examination ticket, clearly and logically answered the questions posed by the examiners. Thoroughly and comprehensively knows the content of theoretical issues, fluent in professional and scientific terminology. Thinks logically and constructs an answer, freely uses acquired theoretical knowledge when analyzing practical tasks. When solving a clinical problem, he correctly interpreted the anamnesis data, the results of clinical, laboratory and instrumental studies, answered all the questions correctly and convincingly substantiated his point of view, could propose and justify an alternative version of the decision on individual issues. When solving a practical task according to the OSKI type, he correctly demonstrated the implementation of practical skills, strictly followed the algorithm of their implementation.
Good	The student completed all the tasks of the examination ticket in a sufficiently complete manner, clearly and logically answered the questions posed by the examiners. He knows the content of theoretical issues deeply and comprehensively, and has professional and scientific terminology. Thinks logically and constructs an answer, uses acquired theoretical knowledge when analyzing practical tasks. But when teaching some questions, there is not enough depth and argumentation, it makes insignificant mistakes, which are eliminated by the applicant himself when the examiner points them out. When solving a clinical problem, he assumed insignificant errors or inaccuracies in the interpretation of anamnesis data, the results of clinical, laboratory and instrumental studies, answered all the questions without significant errors, fully substantiated his point of view, but the proposal of an alternative option caused difficulties. When solving a practical task according to the OSKI type, he made minor mistakes in the algorithm and technique of performing skills, which were corrected at the instruction of the teacher.
Satisfactorily	The student of education incompletely completed all the tasks of the examination ticket, the answers to additional and leading questions are vague and vague. Possesses a basic amount of theoretical knowledge, uses professional and scientific terminology inaccurately. Experiences significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in the analysis of practical tasks. There are significant errors in the answers. When solving a clinical problem, he interpreted the anamnesis data, the results of clinical, laboratory and instrumental studies with errors, did not know individual details, allowed inaccuracies in the answers to questions, did not sufficiently justify his answers and interpret the wording correctly, experienced difficulties in completing tasks and offering alternative options. When solving a practical task of the OSKI type, significant errors were made in the algorithm and technique of performing the

	skill.
Unsatisfactorily	The student of education did not complete the task of the examination ticket, in most cases did not answer the additional and leading questions of the examiners. He did not master the basic amount of theoretical knowledge, he showed a low level of mastery of professional and scientific terminology. Answers to questions are fragmentary, inconsistent, illogical, cannot apply theoretical knowledge when analyzing practical tasks. There are a significant number of gross errors in the answers. When solving a clinical problem, he could not interpret the received data from the anamnesis, the results of clinical, laboratory and instrumental studies, answer the questions, or made significant mistakes in the answers; could not justify his decisions or did it unconvincingly. He did not offer alternative options. When solving a practical task according to the OSKI type, he did not demonstrate or make gross errors and mistakes in the algorithm and skill performance technique.

9. Distribution of points received by students of higher education

The grade for the discipline consists of 50% of the grade for the current academic performance and 50% of the grade for the differentiated assessment.

The average score for the discipline is translated into a national score and converted into points on a multi-point scale (200-point scale).

The conversion of a traditional grade into a 200-point grade is performed by the information and technical department of the University using the "Contingent" program according to the formula:

$$\text{Average success score (current success in the discipline)} \times 40$$

Table of conversion of traditional assessment to multi-point assessment

National assessment for discipline	Sum of balls for discipline
Well («5»)	185 – 200
Good («4»)	151 – 184
Satisfactorily («3»)	120 – 150
Unsatisfactorily («2»)	Low 120

According to the *ECTS rating scale*, the achievements of students in the educational component who study in the same course of the same specialty are evaluated, according to the points they received, by ranking, namely:

Conversion of the traditional grade from the discipline and the sum of points on the ECTS scale

Evaluation on the ECTS scale	Statistical indicator
A	Top 10% achievers
B	The next 25% of achievers
C	The next 30% of achievers
D	The next 25% of achievers
E	The next 10% of achievers

10. Methodological support

- Working program of the academic discipline
- Syllabus
- Methodical developments for practical classes
- Methodical recommendations for independent work of higher education applicants

- Multimedia presentations
- Situational clinical tasks
- Scenarios of role-playing games (if necessary)
- Electronic bank of test tasks by subdivisions of the discipline

11. Questions for preparation for final control

1. Dental deposits. Formation mechanism, structure, physical properties, chemical composition. Methods of plaque removal.
2. Clinical and additional methods of examining patients in therapeutic dentistry.
3. Caries in the stage of spots. Clinic, diagnosis, differential diagnosis, treatment. Prevention
4. Superficial tooth decay. Clinic, diagnosis, differential diagnosis, treatment. Prevention
5. Meddle caries. Clinic, diagnosis, differential diagnosis, treatment. Prevention
6. Deep caries. Clinic, diagnosis, differential diagnosis, treatment. Prevention
7. Oral hygiene. Hygienic indices and their values.
8. Classification of pulpitis. Clinical and additional diagnostic methods.
9. Surgical method of treatment of pulpitis. Indications, technique of conducting.
10. One-session method of treating pulpitis. Indications, technique of conducting.
11. Periodontitis. Classification. Clinical and additional diagnostic methods.
12. Basic principles of acute periodontitis treatment. Emergency aid.
13. Basic principles of chronic periodontitis treatment. Medicinal products.
14. Methods of assessing the state of periapical tissues. X-ray diagnosis of periodontitis.
15. Methods of expanding difficult root canals. Tools and means.
16. Medicinal treatment of carious cavities and root canals. Means.
17. Methods of sealing root canals. Choice of method. Conducting methods.
18. Accounting and reporting documentation at the therapeutic appointment.
19. Clinical and additional methods of examination of patients with periodontal tissue pathology.
20. Index assessment of periodontal tissue condition: hygienic indices - Fedorova-Volodkina and Green-Vermillion, Schiller-Pysarev test, RMA index, CPITN index.
21. Місцеве лікування захворювань пародонту. Терапевтичні місцеві втручання. Види, медикаментозні засоби.
22. Physiotherapy methods in the diagnosis and treatment of periodontal diseases.
23. Local treatment of diseases of the mucous membrane of the oral cavity. Therapeutic local interventions. Types, medicinal products.

LIST

PRACTICAL SKILLS, THE ACQUISITION OF WHICH IS CONTROLLED DURING DIFFERENTIATED ASSESSMENT

Dental manipulations. (List 7).

1. Conducting electro-odontological diagnostics.
2. Applying an isolating liner.
3. Carrying out differential diagnosis of decubitus ulcer.
4. Diagnostic use of caries detector.
5. Interpretation of X-ray data.
6. Removal of necrotic plaque in the treatment of ulcerative-necrotic gingivitis.
7. Differential diagnosis of systemic hypoplasia.
8. Survey scheme of a dental patient.
9. Scheme of examination of the causative tooth.
10. Determination of the depth of the periodontal pocket
11. Determination of tooth mobility
12. Deep fluoridation of teeth
13. Irrigation of root canals
14. Applying an adhesive system when sealing surface caries under a photopolymer material

15. Preparation of carious cavities of classes I and V according to Black, taking into account the type of filling material
16. Preparation of carious cavities of classes II - IV according to Black, taking into account the type of filling material
17. Applying a light-curing therapeutic liner
18. Teaching the patient about individual hygiene in periodontal diseases
19. Teaching the patient about individual hygiene with catarrhal gingivitis
20. Carrying out differential diagnosis in initial caries
21. Applying a temporary filling made of dentin paste
22. Providing first aid for acute forms of periodontitis
23. Instrumental processing of the root canal using the Step-back technique
24. Sealing of a carious cavity using a photopolymer material
25. Sealing of the root canal with calcium hydroxide using a canal filler
26. Installation of a sectional matrix in the treatment of caries class 2 according to Black
27. Introduction of Metrogil-dent gel into the periodontal pocket
28. Treatment planning for hypertrophic gingivitis during pregnancy
29. Preventive coating of teeth with fluoride varnish
30. Pulp extirpation in chronic gangrenous pulpitis
31. Local treatment of chronic relapsing aphthous stomatitis (ChRAS)
32. Carrying out professional hygiene of the oral cavity using the instrumental method
33. Determination of the working length of the root canal during endodontic treatment using an apex locator
34. Completing the dental patient's medical history
35. Application of devitalized paste during surgical treatment of pulpitis
36. Description of the orthopantomogram of a dental patient
37. Application of chlorophyllipt on the gums in the treatment of catarrhal gingivitis
38. Grinding and polishing of fillings made of composite materials
39. Sealing of a carious cavity using a chemical hardening composite
40. Treatment of a wedge-shaped defect with the help of SIC
41. Carrying out professional hygiene of the oral cavity using the ultrasonic method
42. Conducting treatment of chronic mechanical trauma
43. Conducting the treatment of thermal trauma of the SOPR
44. Treatment of acute herpetic stomatitis
45. Preparation and application of hardening dressings for periodontitis
46. Sealing of the root canal by the central pin method

12. Recommended literature

Main:

1. Practical periodontology: manual: trans. 2nd Eng. kind. / Kenneth Eaton, Philip Over; of science ed. trans. Anatoly Borysenko. - K.: VSV "Medicine", 2023. - 312 p.
2. Therapeutic dentistry: Textbook for students of the stomatological faculty of higher educational institutions of the I V level of accreditation / Edited by Anatoliy Nikolishin - ed. 2nd, corrected and supplemented. – Vinnytsia: Nova kniga, 2012. – 680 p.
3. Therapeutic dentistry: In 4 volumes — Volume 2. Caries. Pulpit. Periodontitis. Oral sepsis: Textbook for students. stomatal f-tiv honey. ZVO — 3rd edition. Recommended by the Ministry of Health / Ed. A.V. Borysenko — K., 2020. — 592 p.

4. Therapeutic dentistry: in 4 volumes. — Volume 3. Periodontal disease: a textbook (University III-IV years) / M.F. Danylevskyi, A.V. Borysenko, M.Yu. Antonenko and others; under the editorship A.V. Borysenko — 2nd ed., revised. and suppl.. 2018. — 624 p.

5. Dental diseases: therapeutic stomatology, ed. prof. Borysenko A.V. - K.: Medicine, 2017. - 664 p.

6. Pharmacotherapy of diseases of the mucous membrane of the oral cavity and periodontal tissues, edited by Prof. A. V. Borysenko. - K.: Medicine, 2018. - 504 p.

Additional:

1. Biloklytska G.F., Asharenkova O.V., Solntseva T.O., Kopchak O.V., Bogdanova M.M. Modern means of individual oral hygiene and indications for their use in complex treatment of periodontal tissue and mucous membrane diseases. - K.: "Interservice" LLC 2015. - 22 p.

2. Biloklytska G.F., Kopchak O.V., Asharenkova O.V. Hyperesthesia of hard dental tissues: differentiated approaches to treatment and prevention depending on the features of etiology and pathogenesis. - K.: "Interservice" LLC 2015. - 25 p.

3. Biloklytska G.F., Reshetnyak O.V. Complex treatment of patients with candidiasis of the mucous membrane of the oral cavity, Kyiv 2015. — 20 p.

4. Kopchak O.V. Optimization of treatment protocols for patients with generalized periodontitis / O.V. Kopchak, G.F. Biloklytska, O.V. Asharenkova, K.A. Yanishevsky // Oral and General health. - 2021. - Vol. - 2. - No. 2. <http://www.mif-ua.com/m/archive/article/50936>

5. Biloklytska Galyna F. Resources to improve the effectiveness of periodontal treatment in patients with diabetes mellitus / Galyna F. Biloklytska, Svitlana Yu. Viala // Wiadomości Lekarskie. — 2021. — LXXIV. - ISSUE - 3. — Part — 2.— P. 702 — 708.

6. Kopchak Oksana Improvement of treatment guidelines for patients with gingival fibromatosis considering interdisciplinary approach / Oksana Kopchak, Oleksii Azarov, Svetlana Cherniak, Olha Asharenkova, Karolina Airapetian // Stomatologia Współczesna. - 2021. - Vol. 28. - No. 1-2. - R. 21 - 27.

7. Bidenko N.V., Borysenko A.V., Vasylychuk O.V. etc.. Algorithms for performing dental and medical manipulations for preparation for the State certification of students of the 5th year in the specialty "Dentistry". - Kyiv: Kniga-plus, 2017. - 455 p.

8. Borysenko A.V., Antonenko M.Yu., Sidelnikova L.F., Melnychuk T.A. Essays on practical periodontology. - K.: LLC "Library "Health of Ukraine" - Kyiv: "Library "Health of Ukraine", 2017. — 348 p.

9. Industrial practice in therapeutic dentistry for students of the IV year: Study guide / T.O. Petrushanko, A.K. Nikolishin, N.M. Ilenko, E.V. Nikolishina, I.O. Ivanytskyi - Kyiv: "Center for Educational Literature", 2018. — 288 p.;

13. Electronic information resources

1. www.ama-assn.org — American Medical Association
2. <http://bma.org.uk> — British Medical Association
3. www.gmc-uk.org - General Medical Council (GMC)