MINISTRY OF HEALTH PROTECTION OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY Department of Therapeutic Dentistry

"APPROVED"

Acting vice-rector for spientiffs and pedagogical work

Edu MBURIACHKIVSKYI

September 1, 2024

WORKING PROGRAM ELECTIVE EDUCATIONAL DISCIPLINES

"Professional oral hygiene. Modern methods of remineralization therapy"

Level of higher education: second (master's)

Field of knowledge: 22 "Health care"

Specialty: 221 "Dentistry"

Educational and professional program: Dentistry

The study program of the academic discipline "Professional oral hygiene. Modern methods of remineralization therapy " is based on 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 Scientific Council of ONMedU (protocol No.10 dated June, 27 2024).

Developers:

head of the department, doctor of medicine, prof. Skiba V.Ya. Head teatcher of the department, PhD in psychology, assoc. prof. S.M. Koval

The program was discussed at the meeting of the department of therapeutic dentistry, protocol No 1 from 27.08, 2024.

Head of the department

Vasyl SKYBA

Agreed with the MEP guarantor

Anatoly GULYUK

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

Protocol No. 1 of "2" september_ 2024

Head of Department Oksana Vientra

1. Description of the educational discipline:

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:	Field of knowledge 22 ''Health care''	Full-time education
		Compulsory discipline
Credits: 3.0	Specialty	Year of training: 4
Hours: 90 Content modules: 1	221 "Dentistry" Level of higher education second (master's)	Semester VII,VIII Lectures (0 hours) Seminars (30 hours) Practical (0 hours) Laboratory (0 hours) Independent work (60 hours) including individual tasks (0 hours) The form of final control is credit

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

The purpose of studying the discipline "Professional oral hygiene. Modern methods of remineralizing therapy" is the acquisition of theoretical knowledge and the formation of practical skills of patient examination; study of etiology, pathogenesis, clinic of initial forms of caries, non-carious lesions of teeth, diseases of periodontal tissues; ability to analyze examination results; carry out differential diagnosis and establish a preliminary diagnosis; determine the method of treatment, including professional hygiene of the oral cavity, remineralization therapy and hard tissues of the teeth; carry out primary and secondary prevention of the most common diseases in the clinic of therapeutic dentistry.

Tasks of the discipline "Professional oral hygiene. Modern methods of remineralizing therapy: to improve knowledge for the formation of practical skills to use equipment, devices and tools in practical activities in the dental office; to be able to evaluate and ensure the quality of the work performed, make informed decisions in professional activities and exchange professional experience. To form students' professional knowledge and skills in the treatment and prevention of dental diseases with the help of professional oral hygiene and remineralization therapy of hard dental tissues.

Competences and learning outcomes, the formation of which contributes to the discipline (interrelationship 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", the discipline "**Professional oral hygiene. Modern methods of remineralizing therapy**" 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 1. Ability to abstract thinking, analysis and synthesis.

- GC 2. Knowledge and understanding of the subject area and understanding of professional activity.
- GC 3. Ability to apply knowledge in practical activities.
- GC 7. Ability to find, process and analyze information from various sources.
- GC 8. Ability to adapt and act in a new situation.
- GC 9. Ability to identify, pose and solve problems.
- GC 11. Ability to work in a team.
- GC 13. The ability to act socially responsibly and consciously.

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.
- **SC** 3. The ability to diagnose: determine the previous, clinical, final, accompanying diagnosis, emergency conditions.
- **SC** 4. Ability to plan and conduct events with prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.
- **SC** 5. Ability to design the process of providing medical care: determine the approaches, plan, types and principles of treatment of diseases of the organs and tissues of the oral cavity and maxillofacial area
- **SC** 8. Ability to perform medical and dental manipulations.
- **SC** 14. Ability to maintain regulatory medical documentation.

Program learning outcomes (PLO):

- PLO 1. Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using the previous data of the patient's history, the data of the patient's examination, knowledge about the person, his organs and systems, establish a probable nosological or syndromic preliminary clinical diagnosis of a dental disease (according to list 2)
- 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. Assign 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 the list 2).
- PLO 4. 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 head physician in the conditions of a medical institution (according to list 2.1).
- 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. Carry out the treatment of the main dental diseases according to the existing algorithms and standard schemes under the control of the head doctor in the conditions of a medical institution (according to list 2.1).

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

- the main principles of the organization of healthcare in Ukraine;
- principles of organization of dental care for the population;
- methods of examining a dental patient, indications and contraindications for their appointment;
- clinical signs of dental diseases;
- methods of prevention of the main dental diseases;
- principles of differential diagnosis of dental diseases;
- principles and stages of treatment of dental patients;
- equipment and tools for professional oral hygiene;
- stages of professional oral hygiene;

- means and preparations for remineralizing therapy in dentistry.

be able:

- collect anamnesis:
- -onduct a general examination and examination of the organs of the maxillofacial region;
- -conduct a clinical examination of a dental patient and analyze its results;
- compare clinical manifestations of diseases with examination results;
- -carry out differential diagnosis of dental diseases;
- -conduct an examination according to the algorithm. Recording of the dental formula;
- -fill out the WHO epidemiological survey card;
- -determine oral hygiene indices (Fedorova-Volodkina, GrinaVermiliona, Silnes-Lowe);
- -to know the methods of brushing teeth (individual hygiene, controlled brushing, professional oral hygiene);
- -prescribe oral hygiene products depending on the dental status;
- -Remove dental deposits using dental tools, ultrasound;
- -treat teeth with remineralizing agents, fluoride varnish;
- -use diagnostic and treatment medical equipment,
- -maintain medical documentation of the dental office;
- -observe the rules of ethics and deontology in communication with patients, colleagues, doctors;
- -to observe safety and occupational health and safety rules during work.

3. The content of the educational discipline

- **Topic 1.** The concept of individual and professional oral hygiene. The role of oral hygiene in the prevention of the main dental diseases. Subjects and means of individual oral hygiene.
- **Topic 2.** Equipment and tools for professional oral hygiene. Types of scalers, attachments, equipment for air-abrasive processing (handiblasting). Small tools and accessories.
- **Topic 3.** Index system of assessment of oral hygiene (Fedorova-Volodkinoi, GrinaVermiliona, Silnes-Lowe).
 - **Topic 4.** Stages of the professional oral hygiene procedure. Modern algorithm.
- **Topic 5.** Peculiarities of individual and professional oral hygiene in periodontal tissue diseases, orthodontic and orthopedic treatment of patients.
- **Topic 6.** Indications for local remineralization therapy for the purpose of prevention and treatment of diseases of hard tissues of teeth. Modern means of remineralizing therapy for initial forms of caries, hyperesthesia of hard dental tissues, after professional hygiene of the oral cavity (desensitizers, fluoride-containing gels, varnishes, discs, etc.).
- **Topic 7.** Methodology of remineralizing therapy: number of sessions, quality control. Carrying out remineralization therapy during pregnancy, orthodontic treatment, preventive remineralization, etc.

4. Structure of the academic discipline:

Titles of topics Number of hours		Titles of topics Number of hours				
	Incl udin		Includi	ng everyt	hing	
		lectur es	semin ars	practi cal	labo rator y	IW
Topic 1. The concept of individual and professional oral hygiene. The role of oral	10		2			8

hygiene in the prevention of the main dental diseases. Subjects and means of individual oral hygiene.			
Topic 2. Equipment and tools for professional oral hygiene. Types of scalers, attachments, equipment for air-abrasive processing (handiblasting). Small tools and accessories.		4	8
Topic 3. Index system of assessment of oral hygiene (Fedorova-Volodkinoi, GrinaVermiliona, Silnes-Lowe).	10	2	8
Topic 4. Stages of the professional oral hygiene procedure. Modern algorithm.	12	4	8
Topic 5. Peculiarities of individual and professional oral hygiene in periodontal tissue diseases, orthodontic and orthopedic treatment of patients.		6	8
Topic 6. Indications for local remineralization therapy for the purpose of prevention and treatment of diseases of hard tissues of teeth. Modern means of remineralizing therapy for initial forms of caries, hyperesthesia of hard dental tissues, after professional hygiene of the oral cavity (desensitizers, fluoride-containing gels, varnishes, discs, etc.).		6	10
Topic 7. Methodology of remineralizing therapy: number of sessions, quality control. Carrying out remineralization therapy during pregnancy, orthodontic treatment, preventive remineralization, etc.		6	10
Тотаl	90	30	60

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lectures

Lectures are not provided.

5.2. Topics of practical classes

Practical classes are not provided

5.3. Thematic plan of seminar classes

№ 3/П	Topic name	Number
		hours
1	Topic 1. The concept of individual and professional oral hygiene. The role	2
	of oral hygiene in the prevention of the main dental diseases. Subjects and	
	means of individual oral hygiene.	
2	Topic 2. Equipment and tools for professional oral hygiene. Types of	4
	scalers, attachments, equipment for air-abrasive processing (handiblasting).	
	Small tools and accessories.	
3	Topic 3. Index system of assessment of oral hygiene (Fedorova-	2
	Volodkinoi, GrinaVermiliona, Silnes-Lowe).	
4	Topic 4. Stages of the professional oral hygiene procedure. Modern	4
	algorithm.	
5	Topic 5. Peculiarities of individual and professional oral hygiene in	6
	periodontal tissue diseases, orthodontic and orthopedic treatment of	
	patients.	

6	Topic 6. Indications for local remineralization therapy for the purpose of	6
	prevention and treatment of diseases of hard tissues of teeth. Modern means	
	of remineralizing therapy for initial forms of caries, hyperesthesia of hard	
	dental tissues, after professional hygiene of the oral cavity (desensitizers,	
	fluoride-containing gels, varnishes, discs, etc.).	
7	Topic 7. Methodology of remineralizing therapy: number of sessions,	6
	quality control. Carrying out remineralization therapy during pregnancy,	
	orthodontic treatment, preventive remineralization, etc.	
	Total	30

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work

3.0	o. macpenaent work	NT 1
No.	Topic name	Number
3/П		hours
1	Topic 1. The concept of individual and professional oral hygiene. The role	8
	of oral hygiene in the prevention of the main dental diseases. Subjects and	
	means of individual oral hygiene.	
2	Topic 2. Equipment and tools for professional oral hygiene. Types of	8
	scalers, attachments, equipment for air-abrasive processing (handiblasting).	
	Small tools and accessories.	
3	Topic 3. Index system of assessment of oral hygiene (Fedorova-	8
	Volodkinoi, GrinaVermiliona, Silnes-Lowe).	
4	Topic 4. Stages of the professional oral hygiene procedure. Modern	8
	algorithm.	
5	Topic 5. Peculiarities of individual and professional oral hygiene in	8
	periodontal tissue diseases, orthodontic and orthopedic treatment of	
	patients.	
6	Topic 6. Indications for local remineralization therapy for the purpose of	10
	prevention and treatment of diseases of hard tissues of teeth. Modern means	
	of remineralizing therapy for initial forms of caries, hyperesthesia of hard	
	dental tissues, after professional hygiene of the oral cavity (desensitizers,	
	fluoride-containing gels, varnishes, discs, etc.).	
7	Topic 7. Methodology of remineralizing therapy: number of sessions,	10
	quality control. Carrying out remineralization therapy during pregnancy,	
	orthodontic treatment, preventive remineralization, etc.	
	Total	60

7. Teaching methods

The teaching of the selective educational discipline "Professional oral hygiene. Modern methods of remineralizing therapy" in seminar classes is provided by methodical developments for each seminar class, visual teaching aids for each class (presentations, video lectures), the department's information resource, and structured skill control algorithms.

Independent work in the study of a selective academic discipline is ensured by methodical developments for independent work, visual teaching aids (video lectures, presentations), information resource of the department, topics of independent work, structured algorithms of skill control.

There is no final control, the study of the discipline ends with a credit at the last seminar class.

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

Current control:

1. Evaluation of theoretical knowledge on the subject of the lesson: methods: survey, solving a situational clinical problem;

the maximum score is 5, the minimum score is 3, the unsatisfactory score is 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, role play. the maximum score is 5, the minimum score is 3, the unsatisfactory score is 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.

Final control: credit.

Credit is given to the applicant who completed all tasks of the work program of the academic discipline, took an active part in practical classes, completed and defended an individual assignment and has an average current grade of at least 3.0 and has no academic debt.

Assessment is carried out: at the last lesson before the beginning of the examination session - with the tape system of learning, at the last lesson - with the cycle system of learning. The credit score is the arithmetic mean of all components according to the traditional four-point scale and has a value that is rounded according to the statistics method with two decimal places after the decimal point.

9. Distribution of points received by higher education applicants

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:

Average success score (current success in the discipline) x 40 Table of conversion of traditional assessment to multi-point assessment

National assessment for discipline	The sum of points for the discipline
Excellent ("5")	185 – 200
Good ("4")	151 – 184
Satisfactory ("3")	120 – 150
Unsatisfactory ("2")	Less 120

A multi-point scale (200-point scale) characterizes the actual success of each applicant in learning the educational component. The conversion of the traditional grade (average score for the academic discipline) into a 200-point grade is performed by the information and technical department of the

University.

According to the obtained points on a 200-point scale, the achievements of the applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows you to evaluate the achievements of students from the educational component who are studying in the same course of the same specialty, according to the points they received.

The ECTS scale is a relative-comparative rating, which establishes the applicant's belonging to the group of better or worse among the reference group of fellow students (faculty, specialty). An "A" grade on the ECTS scale cannot be equal to an "excellent" grade, a "B" grade to a "good" grade, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale. Acquirers who have received grades of "FX" and "F" ("2") are not included in the list of ranked acquirers. The grade "FX" is awarded to students who have obtained the minimum number of points for the current learning activity, but who have not passed the final examination. A grade of "F" is given to students who have attended all classes in the discipline, but have not achieved a grade point average (3.00) for the current academic activity and are not admitted to the final examination.

Applicants who study in one course (one specialty), based on the number of points scored in the discipline, are ranked on the ECTS scale as follows:

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

Score on a scale ECTS	Statistical indicator
A	Top 10% achievers
В	The next 25% of earners
С	The next 30% of earners
D	The next 25% of earners
Е	The next 10% of earners

10. Methodical provision

- 1. Working training program in the discipline "Professional oral hygiene. Modern methods of remineralizing therapy".
- 2. Methodical developments for applicants for seminar classes.
- 3. Questions and tasks for current control of knowledge and skills of applicants.
- 4. Textbooks and study guides.
- 5. Scientific works of professors and teaching staff of the department and other researchers on problems of philosophy and methodology of science.
- 6. A collection of test tasks, an electronic bank of test tasks, situational tasks as part of methodological developments for seminar classes.

11. Questions for preparing for the final inspection

- 1. The concept of individual oral hygiene.
- 2. The role of oral hygiene in the prevention of major dental diseases.
- 3. Subjects and means of individual oral hygiene.
- 4. The concept of professional oral hygiene.
- 5. Equipment and tools for professional oral hygiene.
- 6. Types of scalers, nozzles. Methodology of work.
- 7. Equipment for air-abrasive processing (handiblasting). Technique of use. Types of handblasting powder.
- 8. Small tools and accessories for professional oral hygiene.
- 9. Index system for oral hygiene assessment (Fedorova-Volodkina).
- 10. Index system for evaluating oral hygiene (Green Vermilion).
- 11. Index system for evaluating oral hygiene (Silness-Lowe).

- 12. Stages of the professional oral hygiene procedure. Modern algorithm.
- 13. Peculiarities of individual and professional oral hygiene in periodontal tissue diseases.
- 14. Peculiarities of individual and professional oral hygiene during orthodontic treatment of patients.
- 15. Peculiarities of individual and professional oral hygiene during orthopedic treatment of patients.
- 16. Indications for local remineralizing therapy for the prevention of diseases of hard tissues of teeth.
- 17. Indications for local remineralizing therapy for the treatment of diseases of hard tissues of teeth.
- 18. Modern means of remineralizing therapy for initial forms of caries (desensitizers, fluoride-containing gels, varnishes, discs, etc.).
- 19. Modern means of remineralizing therapy for hyperesthesia of hard dental tissues.
- 20. Modern means of remineralizing therapy after professional hygiene of the oral cavity.
- 21. Method of carrying out remineralizing therapy: number of sessions. Stages, means.
- 22. Methodology of remineralizing therapy: quality control.
- 23. Carrying out remineralizing therapy during pregnancy.
- 24. Carrying out remineralizing therapy during orthodontic treatment.
- 25. Preventive remineralization. Indication. Conducting 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. Bidenko N.V., Borysenko A.V., Vasylchuk 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. 408 p.
- 3. Periodontology and diseases of the oral mucosa: in 2 volumes: textbook. for honey universities, institutes, acad. / Borysenko A.V., Lynovytska L.V., Nesyn O.F. etc.; under the editorship A.V. Borysenko, 2018. 624 p.
- 4. Clinical pharmacology and pharmacotherapy in dentistry: teaching. manual for honey universities, institutes, acad. 2nd edition Recommended by the Academic Council of the NMAPO named after P.L. Shupyka / Mazur I.P., Haytovych M.V., Golopyho L.I., 2019. 376 p.
- 5. Emergencies in dental practice: teaching. manual for honey universities, institutes, acad. dental profile. 2nd ed., ed. Recommended by the Ministry of Health and the Ministry of Health / Skrypnyk I.M., Skrypnikov P.M. et al., 2017. 224 p.
- 6. Dental diseases: therapeutic stomatology: tutorial. for honey University I-III, R.A. Approved by the Ministry of Health / A.V. Borysenko, M.Yu. Antonenko, L.V. Lynovytska and others; under the editorship A.V. Borysenko, 2017. 664 p.
- 7. Dentistry: in 2 books. Book 2: assistant for honey universities, institutes, acad. 2nd edition Approved by the Ministry of Health / edited by M.M. Rozhka, 2018. 992 p.

Auxiliary

- 1. 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.
- 2. Prevention of dental diseases: tutorial. for students higher med. education closing / L.F. Kaskova, L.I. Amosova, O.O. Karpenko [and others]; under the editorship Prof. L.F. Kaskova Kh.: Fakt, 2011. 392 p. Grig N.I., Sidelnikov P.V.
- 3. Bidenko N. V., Borysenko A. V., Vasylchuk O. V., Volynets V. M., Volovar O. S., Golubeva I. M. and others. Algorithms for performing dental and medical manipulations for preparation for the State certification of students of the 5th year in the specialty "Dentistry". Kyiv, "Book plus", 2017. 401 p.

- 4. 3. Bidenko N. V., Borysenko A. V., Vasylchuk O. V., Volynets V. M., Volovar O. S., Golubeva I. M. and others. Algorithms for performing dental and medical manipulations for preparation for the State certification of students of the 5th year in the specialty "Dentistry". Kyiv, "Book Plus", 2018. 448 p.
- 5. Hryg N.I., Sidelnikov P.V. Comprehensive assessment of the hygienic state of the oral cavity the basis of prevention of complications of surgical treatment of generalized periodontitis / P.V. Sidelnikov, N.I. Grig // Modern dentistry. 2013. No. 4. P.54-58.
- 6. Information and educational environment info.onmedu.edu.ua

13. Information resources

- 1. Official website of ONMedU https://onmedu.edu.ua/
- 2. Electronic information resources of the ONMedU library http://info.odmu.edu.ua/
- Electronic catalog of the library.
- Information and reference sources: encyclopedias, directories, dictionaries
- Educational electronic publications and resources: manuals containing systematized material within the curriculum of the academic discipline.