MINISTRY OF HEALTHCARE OF UKRAINE KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Therapeutic Dentistry Educational year 2021-2022

EDUCATIONAL DISCIPLINE SYLLABUS

«PROPAEDEUTICS OF THERAPEUTIC DENTISTRY» (name of the academic discipline)

Normative or elective educational component normative

Format of educational component_

internal (internal; hybrid; distant)

Field of knowledge <u>22 "Health care"</u>

(code and name of the field of knowledge)

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

Specialization (by availability) _

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

Course 2nd

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

Protocol from "30th" of August 2021 № 22

Acting Head of the Department of Therapeutic Dentistry

(signature)

prof. Y.M. Ryabokon (surname and initials) Protocol from "02nd" of September 2021 № 4

Approved by the methodical commission of

KhNMU on the problems of dental profile

The Chairman

(signature

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

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Face-to-face consultations: by prior arrangement;

Online consultations: Moodle system, ZOOM system, GOOGLE MEET system according to the schedule; **Location:** classes are held in the conditions of UDC KhNMU, remotely-in the ZOOM, GOOGLE MEET or MOODLE systems.

INTRODUCTION

Educational discipline syllabus «Propaedeutics of therapeutic dentistry» was prepared in accordance with educational and professional program (hereinafter referred to as "EPD") "Dentistry" and Ukraine Standards for higher education (hereinafter referred to as "Standard"), second (master's) level, knowledge 22 "Health care", specialty 221 "Dentistry" - master.

Educational and professional program "Dentistry" of the second (master's) level of higher education in the specialty 221 Dentistry knowledge 22 Health care Qualification: Master of Dentistry is based on:

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

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

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

Description of the discipline (abstract).

Propaedeutics of therapeutic dentistry is a preparatory pre-clinical course, the methods of which are aimed at the formation of knowledge and skills that contribute to the assimilation of the discipline «Therapeutic dentistry».

The study of the academic discipline «Propaedeutics of therapeutic dentistry» is carried out by students in the 2nd year of study in the III-IV semesters.

Silabus is organized using modern pedagogical principles of organizing the educational process of Higher Education.

The subject of study of the discipline is the issue of clinical features of the structure of teeth, tissues and organs of the oral cavity, organization and equipment of the dental office, principles, methods and stages of preparation of carious cavities of various localization, composition, properties and methods of using dental filling materials, endodontic treatment of tooth cavities and root canals, materials and methods of their obturation.

Interdisciplinary connections: the study of propaedeutics in therapeutic dentistry is based on students ' previously acquired knowledge of human anatomy, Histology, Cytology and Embryology, biological and Bioorganic Chemistry, Medical Physics, medical biology and integrates with these disciplines.

Prequisiti. The study of the discipline provides for preliminary assimilation of credits basic disciplines and the presence of a sufficient educational level for mastering the issues of the discipline program.

Post-requisition. The main provisions of the academic discipline should be applied in the study of therapeutic dentistry.

Educational discipline MOODLE website

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

1.

PURPOSE AND OBJECTIVES OF THE EDUCATIONAL DISCIPLINE

- **1.1. The purpose** of teaching the academic discipline «Propaedeutics of therapeutic dentistry» is to prepare students to work in the clinic when mastering the discipline «Therapeutic Dentistry», the purpose of which is to form the personality of a dentist who can diagnose and treat diseases of teeth, periodontal tissues and oral mucosa.
- **1.2.** The main **objectives** of studying the discipline «Propaedeutics of therapeutic dentistry» is to obtain theoretical knowledge on the clinical features of anatomical and histological structure of teeth, tissues and organs of the oral cavity, organization and equipment of the dental office, Materials Science in therapeutic dentistry, methods and techniques of preparation and filling of carious cavities, stages of endodontic dental treatment and assimilation of basic manual skills in dental treatment preparation and filling of carious cavities of classes I-V according to Black with various filling materials (cements, amalgams, composite materials) on models of teeth, endodontic intervention (opening and preparation of the tooth cavity, amputation and extirpation of pulp, medical and instrumental treatment of root canals and their obturation), etc.
- **1.3. Competence and the result of the elective course**, the formation of which is facilitated by discipline (interrelation with the normative basis for the training of applicants for higher education, formulated in education result therms in EPD and Standard).

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

integral:

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

general:

- 1. Ability for abstract thinking, analysis and synthesis.
- 2. Knowledge and understanding of the subject area and understanding of professional activities.
- 3. Ability to apply knowledge in practice.
- 4. Ability to communicate in the state language both orally and in writing.
- 5. Ability to communicate in English.
- 6. Skills in the use of information and communication technologies.
- 7. Ability to search, process and analyze information from various sources.
- 8. Ability to adapt and act in a new situation.
- 9. Ability to show, pose and solve problems.
- 10. Ability to be critical and self-critical.
- 11. Ability to work in a team.
- 12. Commitment to preserving the environment.
- 13. Ability to act in a socially responsible and conscious manner.

14. The ability to realize their rights and obligations as a member of society, to understand the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.

15. The ability to preserve and increase the moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, to use various types and

forms of physical activity for active recreation and a healthy lifestyle.

special (professional, subject):

1. Ability to interpret the result of laboratory and instrumental studies.

2. Ability to plan and implement measures for the Prevention of diseases of organs and tissues of the oral cavity and maxillofacial region.

3. Ability to design the process of providing medical care: determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.

4. Ability to perform medical and dental manipulations.

5. Ability to determine tactics, methods, and provide emergency medical care.

6. Ability to assess the impact of the environment on the health status of the population (individual, family, population).

- 7. Ability to maintain regulatory medical records.
- 8. Processing of state, social and medical information.
- 9. Ability to legally support their own professional activities.

10. Ability to provide pre-medical care according to tactical medicine protocols.

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

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

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

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

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

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

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

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

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

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

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

• communication (implemented through: the method of working in groups and brainstorming during the analysis of clinical cases, the method of presenting the results of independent work and their protection in the group),

• teamwork (implemented through: group work method and brainstorming during the analysis of clinical cases),

• conflict management (implemented through: business games),

• time management (implemented through: the method of self-organization during classroom work in groups and independent work),

• leadership skills (implemented through: the method of presenting the results of independent work and their defense in the group).

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

Teaching methods.

For conducting classes, phantoms, electronic-informational (presentations, video materials, methodological recommendations, lectures), scientific (participation in scientific developments in the discipline), control (tests, assessment of practical skills).

2. INFORMATION SCOPE OF THE DISCIPLINE Description of the discipline

| 2.1. Description of the discipline | | | | | | |
|--|---|--|--|--|--|--|
| Name of indicators | Branch of knowledge, direction of training, | Characteristics of the academic discipline | | | | |
| | educational and qualification level | full-time education | | | | |
| Number of credits – 3,0 | Training area <u>22 «Healthcare»</u> (cipher and name) | Normative discipline | | | | |
| Total number of hours – 90 | Specialty: <u>221 «Dentistry» - masters</u> (code and name) | Year of preparation: 2nd Semester 3rd, 4th | | | | |
| Hours for full-time education: audience data – 60 independent work of the student – 30 | Educational and qualification level: SECOND MASTER'S LEVEL | Lectures – 6 hours Practical – 54 hours Laboratory tests – Independent work – 30 hours Individual tasks Type of control: differentiated credit | | | | |

2.2.1. Lectures

| N₂ | Topic of the lecture | Hours | Lecture type |
|----|--|-------|---|
| 1. | Historical stages of development of dentistry, its sections. The value of works of scientists of Ukraine. Histological and clinical anatomy of the teeth. Dental formula. Signs of teeth. | 2 | introductory, informative (thematic) lecture with visualization elements |
| 2. | Classification of cavities by Black. Basic principles of preparation of carious cavities. Stages and features of classic preparation of carious cavities depending on the class. Modern methods of preparation of carious cavities for the composite materials using nontraditional methods of preparation. Ergonomics in dentistry. | 2 | current informational (thematic) lecture with |
| 3. | Filling materials for permanent and temporary fillings and dressings. General requirements. Classification. Modern filling materials (cement, amalgam, composite materials). Composition, properties. Indications for use. | | visualization elements |
| 4. | Endodontics. Definition of the term. Clinico-anatomical structure of cavities and root canals. Endodontic instruments: the variety, the appointment, terms of use. Standards ISO. Basic endodontic manipulation: trepanation cavity tooth, amputation, extirpation of the pulp. Techniques for purification and expansion of root canals («Step-Back», «Crown-Down» technology). Tooling impenetrable root canals: impregnation and mummification. Medications. Depoforez. Errors and complications. | 2 | current informational (thematic) lecture with visualization elements |
| 5. | Root canal filling. Instruments for root canal obturation, the standards ISO. Filling materials: classification, composition, properties of different groups of sealers, indications for use. Modern technologies of root canal sealers and using filler: methods center pin, vertical, cold and warm lateral condensation of gutta-percha obturation of the root canal system «Thermafil». Errors and complications. | | |
| | Total | 6 | |

2.2.2. Topics of seminars. Not provided for in the curriculum.

2.2.3. Topics of practical classes of the elective course "Propaedeutics of therapeutic dentistry"

| Nº | Topics | Hours | Teaching methods | Control forms |
|----|---|-------|---|------------------|
| 1. | Propaedeutics, as an independent discipline in the system of therapeutic dentistry. Contribution of scientists of Ukraine in its development, aims and objectives introductory course. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, discussion, round table, business, role- playing, simulation game | oral examination |
| 2. | The structure of the tooth: topography of tissues and structures of the tooth. Histology of enamel, dentin and cement. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos | oral examination |
| 3. | The structure of the pulp and periodontum. Age-related changes in them. The concept of parodontum, its function. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos | oral examination |
| 4. | Dental formula. Signs of teeth, clinico-anatomic features of the upper and lower jaw incisors. | 2 | story-explanation, conversation, illustration, demonstration, | oral examination |

| | | | presentation, videos, | |
|-----|--|---|--|---------------------------------------|
| 5. | Clinico-anatomical structure of canines, premolars and molars of upper and lower jaws. | 2 | videos story-explanation, conversation, illustration, demonstration, presentation, videos, videos | oral examination; individual tasks |
| 6. | Classification of caries cavities by Black. Principles and rules of preparation of caries cavities. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination |
| 7. | Preparation of I and V class caries cavities by Black. Errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 8. | Preparation of II class caries cavities by Black. Errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 9. | Preparation of III classes of caries cavities by Black. Errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 10. | Preparation of IV classes of caries cavities by Black. Errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 11. | Preparation of atypical caries cavities. Modern techniques of preparation of caries cavities for composite filling materials: MI- therapy, ART- method and tunnel technique of preparation. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 12. | Filling materials. Classification. Requirements. Materials for temporary fillings and hermetic bandages. Therapeutic (medical) liners: groups, composition, properties, indications for usage, technique of applying. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 13. | Dental cements and their classification. Composition and properties of zinc-phosphate, silicate and silico- phosphate cements. Indications and methods of application. Isolative liners: type's, purpose and features. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with | oral examination; individual tasks |

| | | | simulation equipment, phantoms | |
|-----|--|---|--|--|
| 15. | Glass-ionomer cements. Composition, properties, positive and negative qualities, indications for use. The concept of the contact point, the values of the violations in periodontal disease. Dental accessories for its recovery. Grinding and polishing of fillings: instruments, tools, methods. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 16. | Mechanism of adhesion of various filling materials to the tissues. Adhesive system: composition, principles of interaction with tooth tissues, technique of application. Acid etching, conditioning, purpose, technique, errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 17. | Composite materials: classification, composition. Composite materials of the chemical method of cure: positive and negative properties, indications for use, method of application. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 18. | Composite materials photopolymer solidification method: species, structure, properties. Light cure: purpose, physic-technological characteristic. Technology of safety work. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 19. | Attestation № 1. | 2 | Computer training | oral examination; written survey; test control |
| 20. | Endodontics - its problems and purpose. Endodontic instruments: classification, diversity, destination, application rules. Standards ISO. | 1 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination |
| 21. | Anatomic-topographic features of tooth cavities and root canals of incisors, canines, premolars and molars. | 1 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination |
| 22. | Removing of filling, trepanation of the tooth cavity overlay devitalized substances. Tight and friable bandage. Stages of their imposition. Errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |
| 23. | Amputation, extirpation of the pulp, removing its necrosis: tools, the sequence features of each manipulation complications. Drug treatment of root canals: tools, medicines. Errors and complications. | 2 | story-explanation, conversation, illustration, demonstration, presentation, videos, videos, work with simulation equipment, phantoms | oral examination; individual tasks |

| | Instrumental root canal treatment. Modern methods of | | story-explanation, | oral examination; |
|-----|--|---|-----------------------------|----------------------|
| | root canal treatment: «Step-back», | | conversation, illustration, | individual tasks |
| | «Crown-down». Medicinal facilities for chemical | | demonstration, | |
| 24. | expansion of root canals. Preparing for channel filling. | 2 | presentation, videos, | |
| | | | videos, work with | |
| | | | simulation equipment, | |
| | | | phantoms | |
| | Materials for root canals. Sillers: classification, | | story-explanation, | oral examination; |
| | requirements. Non-hardening filling materials: | | conversation, illustration, | individual tasks |
| | composition, properties of different groups, indications | | demonstration, | |
| 25. | for use, methods and | 1 | presentation, videos, | |
| | stages of filling. | | videos, work with | |
| | | | simulation equipment, | |
| | | | phantoms | |
| | Hardening filling materials for root canals (sillers): | | story-explanation, | oral examination; |
| | composition, properties of different | | conversation, illustration, | individual tasks |
| | groups, indications for use. Methods of filling root | | demonstration, | |
| 26. | canals. | 2 | presentation, videos, | |
| | | | videos, work with | |
| | | | simulation equipment, | |
| | | | phantoms | |
| | Solid materials for root canals for devital (intracanal | | story-explanation, | oral examination; |
| | fillers) and vital (parapulpar pins) teeth. Their varieties, | | conversation, illustration, | individual tasks |
| | positive and negative properties. Modern technology, | | demonstration, | |
| 27. | their value in restoring anatomical form and function of | 1 | presentation, videos, | |
| | tooth. | | videos, work with | |
| | | | simulation equipment, | |
| | | | phantoms | |
| | Features of endodontic treatment with instrumentally | | story-explanation, | oral examination; |
| | inaccessible root canals. Mummification and | | conversation, illustration, | individual tasks |
| | impregnation methods. Objectives and purposes. | | demonstration, | |
| 28. | | 2 | presentation, videos, | |
| | | | videos, work with | |
| | | | simulation equipment, | |
| | | | phantoms | |
| | Attestation № 2. | | Computer training | oral examination; |
| 29. | | 2 | | written survey; test |
| | | | | control |
| • | Differential credit. | 2 | Computer training | Differentiated |
| | | | | |
| 30. | | 2 | | offset. |

2.2.4. Topics of laboratory classes. Not provided for in the curriculum.

2.2.5. Independent work.

| № | Торіс | Number of hours | Teaching methods | Control forms |
|------|--|--------------------|--|---------------------------------------|
| 1. | Preparation for practical classes - theoretical training and development of practical skills. | 13 | theoretical training and development of practical skills | oral examination; individual tasks |
| 2. | Preparation for atestations. | 6 | review of educational and methodical literature, writing essays, conducting research | oral examination; individual tasks |
| 3. | Independent study of topics that are not included in the curriculum: | | review of educational and methodical literature, writing essays, conducting research | oral examination; individual tasks |
| 3.1. | Therapeutic dentistry like the main dental discipline. | 1 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 3.2. | Anatomical and histological features of the stru cture of individual segments of the oral mucosa. | 1 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 3.3. | Saliva. Oral liquid. Containing and functions of saliva. | 1 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 3.4. | Filling material for fissure sealing (fissure sealants). Types, properties, method of work. | 1 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 3.5. | Compomers: composition, properties, indications for use. Clinical application techniques | 1 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 3.6. | Silver and copper amalgams: composition, properties, positive and negative qualities and rules of evidence. Features of grinding and polishing of fillings. | 1 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 4. | Individual out-of-class students work - review of educational and methodical literature, writing essays, conducting research. | | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| 5. | Preparation for differentiated credit. | 5 | review of educational and methodical literature, writing essays, conducting research | Differentiated offset. |
| То | tal | 30 | | |

Teaching methods

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

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

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

Teaching methods can also be divided into:

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

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

Policy assessment

Control methods

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

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

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

- teachers and students, assessing the state of educational work, act on the only agreed criteria, the justification of which is known to all in advance;
- .

assessments obtained as a result of control are considered inviolable, are not in doubt both by those who control and by those who are controlled, as they are based on objective criteria known to both parties;

control and its results require publicity, so that everyone could study them carefully, make reasonable conclusions based on this, which set up for active positive work aimed at the necessary adjustment of the educational process.

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

- objectivity the creation of conditions under which the knowledge, skills and abilities of students would be most accurately expressed, the introduction of uniform requirements, fair treatment of each student, the inadmissibility of elements of bias, the desire to find negative facts or impose purely personal views on these or those theoretical problems, methodical receptions, etc.; at the same time, it should be remembered that the objectivity of control is incompatible with a liberal attitude to shortcomings and errors, superficiality and narrowness in the analysis and evaluation of the work being audited;

- validity of assessments their argumentation;
- regularity an important psychological factor that contributes to the formation of such qualities as organization and discipline, forms perseverance and focus on achieving the goal;

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individual and differentiated approach to the

assessment of knowledge, skills and abilities involves the use of such didactic conditions that reduce psychological tension, take into account the characteristics of the student's nervous system, his character, potential, abilities, etc., making the teacher able to more fully, correctly and more objectively identify and evaluate the knowledge of each student;

• **comprehensiveness and optimality implies:** first, the adequacy of control over learning objectives, i.e. the substantive side of control should control what students are taught and take into account the amount of material to be mastered; secondly, the validity of the control, it should cover all the knowledge, skills and abilities that are controlled; thirdly, reliability - the stability of the results obtained by repeated control after a certain time, as well as the proximity of the results during the control by different teachers;

• **professional orientation of control**, which is due to the targeted training of the specialist and thus helps to increase the motivation of cognitive activity of students - future professionals.

Forms of control:

- •
- •
- •
- self-control;

by method of implementation: oral, written; by way of organization: teacher control, mutual control,

by student coverage: frontal, individual, pair, group;

- on the use of teaching aids: control with the help of printed media, three-dimensional means (models, models, simulators, devices), technical means, computer systems, including support for multimedia files;
 - by level of standardization: standardized, non-

standardized.

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

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

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

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

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

Assessment and mark.

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

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

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

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

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

strength of knowledge.

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

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

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it is necessary to vary the means of control;

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

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

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

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

3. EVALUATION CRITERIA

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

Evaluation of current learning activities (CLA)

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

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

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

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

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

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

Assessment of independent work of students

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

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

Assessment of the final lesson

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

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

- list of theoretical questions (including questions on independent work);
- list of practical skills;
- criteria for assessing the knowledge and skills of students;
- schedule of students completing missed classes during the semester;
- test tasks.

Conducting the final lesson:

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

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

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

Evaluation criteria.

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

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

A grade of "satisfactory" is given to students who answer only those questions that are included in the mandatory minimum list; who are familiar with the main literature recommended by the program. Grades "unsatisfactory" are given to students who have identified gaps in knowledge of the basic curriculum, who have made fundamental errors in the tasks provided by the program, who can not continue their studies without additional classes in therapeutic dentistry.

Conducting a differentiated test

Differentiated test is conducted in 2nd year students by a group teacher in the last lesson on propaedeutics of therapeutic dentistry in the spring semester on the topics of the discipline studied during the 3rd and 4th semesters. The obtained theoretical knowledge, acquired skills of independent work, development of creative thinking, developed skills of knowledge synthesis and their practical use (competencies) are tested on the differential. Differentiated credit consists of 3 parts: computer test control, assessment of practical skills and the level of theoretical knowledge.

Computer test control, which involves solving a package of test tasks on the content of educational material in the amount of 30 tests and is conducted for 2 classes before the last lesson of the semester. Evaluation criterion - 90% of correctly solved tasks. Test tasks are evaluated by the criterion "passed" / "failed": with 27 or more correct answers (90%) - "passed"; less than 27 - "did not pass".

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

On the day of compiling the differential test, the level of mastering of theoretical knowledge is assessed according to the tickets drawn up at the department, which include all topics of the relevant sections of the discipline. The evaluation criteria are shown in table 2.

Table 2

| | ······································ | | | | | | | |
|---------------------|--|-------|------|-------------------------------|---|--|--|--|
| Number of questions | «5» | «4» | «3» | | For each answer the student | | | |
| 1 | 20 | 16,25 | 12,5 | Oral answer for tickets, | receives from 12.5 to 20 | | | |
| 2 | 20 | 16,25 | 12,5 | which include the theoretical | points, which corresponds to: "5" - 20 points; | | | |
| 3 | 20 | 16,25 | 12,5 | part of the discipline | "4" - 16.25 points; | | | |
| 4 | 20 | 16,25 | 12,5 | | "3" - 12.5 points. | | | |
| | 80 | 65 | 50 | | 5 - 12.5 points. | | | |

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

Grade from the discipline

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

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

Individual tasks

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

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

Discipline assessment technology

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

Correspondence of discipline assessment in points to assessment in traditional assessments

| Score on a 200-point | Assessment on the | Score on a four-point |
|----------------------|-------------------|-----------------------|
| scale | ECTS scale | (national) scale |
| 180-200 | А | Excellent |
| 160–179 | В | Good |
| 150–159 | С | Good |
| 130-149 | D | Satisfactorily |
| 120-129 | Е | Satisfactorily |
| Less than 120 | F, FX | Unsatisfactorily |

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

After completing the study of the discipline, the head teacher or teacher puts the student the number of points and the corresponding grade in the record book and fill in the information on the success of students in the discipline on the form U-5.03B - **diff. test**. The grade "**unsatisfactory**" is given to students who were admitted to the differentiated offset, but did not pass it and who are not admitted to the differentiated offset.

List of questions for differentiated credit

Indicative list of theoretical questions for the control of Chapter 1 «Structure of tooth and preparation of caries cavities»

Unit № 1. «Anatomical and histological structure of teeth».

1. Therapeutic dentistry as the main dental discipline, its sections, connection with other disciplines. Goals and objectives of the propaedeutic course.

2. Historical stages of development of therapeutic dentistry. Contribution of Ukrainian scientists to its development (Yu. M. Gofung, I. N. Novik, M. F. Danilevsky, etc.).

3. Histological structure, chemical composition, physiological features of enamel.

4. The concept of structural and functional resistance of enamel.

5. Histological structure, chemical composition, physiological features of dentin. The concept of primary, secondary and tertiary dentin, features of its formation.

6. Histological structure, chemical composition, physical features of cement.

7. Structure of tooth pulp, its functions. Changes in the pulp associated with age and diseases.

8. Structure of the periodontium, its function. Age-related and pathological processes occurring in the periodontium. Periodontal disease: concept, structure.

9. Saliva, oral fluid: composition, properties, functions.

10. Dental formulas: anatomical, clinical, WHO.

11. Signs of teeth: Crown angle, Crown curvature, root deviation, contact surfaces.

12. Clinical and anatomical features of the structure of the incisors of the upper and lower jaw.

13. Clinical and anatomical features of the structure of the premolars of the upper and lower jaw.

14. Clinical and anatomical features of the structure of the molars of the upper and lower jaw.

15. Anatomical and physiological features of the structure of individual areas of the oral mucosa: lips, cheeks, gums, oral floor, transitional folds, hard and soft palate, tongue.

Unit № 2. «Preparation of caries cavities».

1. Organization and equipment of the dental office: hygienic and ergonomic requirements.

2. Labor protection of a dentist. Occupational diseases and their prevention. Safety precautions in the dental office.

3. Modern equipment of the dental office. Types of drills. Universal dental units, chairs.

4. Dental instruments for examination and treatment of the patient, purpose and application features. Types of dental handpieces.

5. Tools for preparation and filling of carious cavities. Dental burs: variety, size, materials for their manufacture.

6. Classification of carious cavities by Black, their localization options for each class, atypical carious cavities.

7. Principles of carious cavities preparation: deontological, anesthesiological, biological feasibility, technical rationality, preservation of periodontal tissues.

8. Causes of pain during preparation of hard tissues of teeth and ways to eliminate them. The concept of the preparation mode.

9. Stages of classical preparation of carious cavities, their features and tools.

10. Features of preparation of carious cavities of class 1 and 5 according to Black.

11. Features of preparation of carious cavities of class 2 according to Black, depending on the location, presence or absence of a neighboring tooth.

12. Features of preparation of carious cavities of class 3 according to Black, depending on the location, presence or absence of a neighboring tooth.

13. Features of preparation of carious cavities of the 4th class according to Black, depending on the location, presence or absence of a neighboring tooth.

- 14. Features of carious cavities preparation for modern composite materials.
- 15. Microintervention preparation (M.I. therapy): indications, features, advantages and disadvantages.
- 16. ART-method of preparation (non-invasive): indications, features, advantages and disadvantages.
- 17. Tunnel preparation: indications, features of the procedure. Possible complications.

Indicative list of theoretical questions for the control of Chapter 2 «Filling materials and Endodontics».

Unit № 3. «Filling materials».

1. Classification of filling materials.

2. Materials for temporary fillings and hermetic bandages. Requirements for them. Composition, properties, features of preparation and use.

3. Temporary filling and sealing bandage. Definitions. Overlay technique.

4. Therapeutic pads: groups, composition, properties, indications, methods of overlay.

5. Classification of dental cements.

6. Phosphate cement: composition, properties, indications, technique of mixing.

7. Isolation of the pulp: the concept. Types of insulating gaskets: liner and base. Insulation materials for pulp: composition, properties, indications, technique overlay.

8. Silico-phosphate cements their composition, properties, indications, technique of mixing and filling.

9. Dental silicate cements, their composition, properties, indications, technique of mixing and filling.

10. Glass ionomer cements, their structure, properties, indications, technique of mixing and filling.

11. The concept of a point of contact when filling the cavity, the value of it in periodontal pathology, recovery methods, the choice of filling material.

12. Silver amalgam: composition, positive and negative qualities, technique of mixing and filling, sanding and polishing of fillings.

13. Classification of composite filling materials. Composition and properties, indications.

14. Etching (conditioning): the purpose, the means and methods of implementation. Errors and complications.

15. Adhesion. Definitions. Types of adhesive systems. The mechanism of adhesion of composite filling materials curing. Adhesive systems: structure, principle of interaction with the tooth, the technique of application.

16. Characterization of adhesive systems 5 and 6 generations. Features of the application. The concept of the smear layer, hybrid zone, the collapse of collagen fibers.

17. Macro-filled composite filling materials: characteristics, indications, techniques sealing, especially grinding and polishing of fillings.

18. Micro-filled hybrid composite filling materials: comparative description, indications, and techniques sealing, especially grinding and polishing of fillings.

19. Photopolimerizator lamps: function, physical and technical characteristics. Safety during working with them.

20. Filling materials for sealing fissures (fissure sealants): types, properties, methods of operation.

21. Compomers: composition, properties, indications for use. Technique of clinical use.

Unit № 4. «Endodontics».

1. Endodontics, definitions. Topographic and anatomical terms and endodontic manipulation.

2. Modern endodontic instruments for cleaning, expansion and root canal: classification, function, rules of application. Standards of ISO.

3. Anatomic and topographic features of the structure of the tooth cavity and root canals of incisors of the upper and lower jaw.

4. Anatomic and topographic features of the structure of the tooth cavity and root canals canines of upper and lower jaws.

5. Anatomic and topographic features of the structure of the tooth cavity and root canal premolars of the upper and lower jaws.

6. Anatomic and topographic features of the structure of the tooth cavity and root canals of molars of the upper and lower jaws.

7. Trepanation crowns of incisors: indications, especially phases, techniques, instruments, errors and complications.

8. Trepanation crowns of canines: indications, especially phases, techniques, instruments, errors and complications.

9. Trepanation crowns of premolars: features, stages, equipment, instruments, errors and complications.

10. Trepanation crowns of molars: features, stages, equipment, instruments, errors and complications.

11. Method of imposing of devitalizing paste: instruments, drugs, errors and complications. The concept of hermetic bandages.

12. Amputation, extirpation and removing of the necrotic pulp: instruments, features of. Errors and complications.

13. Preparation of root canals: medical instruments for root canal procedures «Step-back» and «Crown-down» techniques.

14. Preparation of root canals. Machine instruments for root canal: types of handpieces, endodontic instruments. Device for removing of fragments of broken instruments from root canals.

15. Drug treatment of root canals: instruments, drugs and modern techniques.

16. Chemical expansion of root canals: medications, especially holding. Possible complications. Preparing canals to sealing.

17. Classification of materials for root canal. Their requirements, comparative characteristics.

18. Non hardening filling materials for root canal, antimicrobial and anti-pasta: indications for use, methods and stages of filling.

19. Plastic hardening fillings materials for root canal. Groups, the positive and negative characteristics, indications for use.

20. Solid (fillers) filling materials for root canal. Varieties, both positive and negative qualities. Modern technologies, their general characteristics.

21. Features endodontic intervention in instrumental inaccessible root canals. Mummification and impregnation: indications, drug substances for their conduct, practices. Possible complications.

22. Depophoresis: indications, techniques, possible complications.

23. Preparation guidelines and filling damaged greeting and non-vital teeth, atypical cavities. Parapulparal and intracanal pins. Type of construction: types, assignment.

Indicative list of practical skills for the control of knowledge of Chapter 1 «Structure of tooth and preparation of caries cavities»

Unit № 1. «Anatomical and histological structure of teeth».

1. Schematically draw a tooth. Mark anatomical and histological formations and tissues on the tooth diagram.

2. Record dental formulas: anatomical, clinical and WHO.

3. Draw (sculpt from plasticine) incisors, canines, premolars, molars of the upper and lower jaw, taking into account the anatomical features of the structure of the crown and roots.

4. According to clinical and anatomical features, distinguish incisors, canines, premolars, molars of the upper and lower jaws.

Unit № 2. «Preparation of caries cavities».

- 1. Distinguish and be able to use dental instruments.
- 2. Determine whether carious cavities belong to a certain class according to Black.
- 3. Observe the preparation mode when working on phantoms.
- 4. Prepare carious cavities of class 1 according to Black of various localization on phantoms and removed teeth.
- 5. Prepare carious cavities of class 2 according to Black on phantoms.
- 6. Prepare carious cavities of the 3rd class according to Black on phantoms
- 7. Prepare carious cavities of class 4 according to Black on phantoms.
- 8. Prepare carious cavities of class 5 according to Black on phantoms.
- 9. Prepare carious cavities using non-traditional methods: tunnel preparation, microinvasive preparation.
- 10. Prepare carious cavities for composite materials.

Indicative list of practical skills for the control of knowledge of Chapter 2 «Filling materials and Endodontics»

Unit № 3. «Filling materials».

1. Prepare and put the filling material for temporary fillings or hermetic bandages.

2. Prepare and apply medical paste and temporary filling.

3. Prepare and apply zinc phosphate cement as an isolating lining in cavities of different classes by Black, a temporary filling.

4. Prepare and apply silicate cement, as permanent filling in the cavities of appropriate class by Black on the phantom.

5. Prepare and apply silico-phosphat cement, as permanent filling in the cavities of appropriate class by Black on the phantom.

6. Etching of the enamel, prepare and apply glassionomer cement, as permanent filling in the cavities of appropriate class by Black on the phantom.

7. Restore the contact point in carious cavities of $2^{d}-4^{th}$ classes by Black.

8. Ground and polished fillings from various filling materials.

9. Prepare and impose permanent filling of silver amalgam in the cavities of appropriate class by Blake on the phantom.

10. Etching of the enamel, prepare and cause adhesive, mix and impose permanent filling composite of the chemical hardening method in cavities on the phantom.

11. Etching, prepare and cause adhesive, impose permanent photopolymer filling material in cavities of 3^d, 4th, 5th classes by Black. Conduct directed polymerization.

Unit № 4. «Endodontics».

1. Distinguished by types, structure, purpose, endodontic instruments.

- 2. Create access to the pulp chamber of different groups of teeth (trepanation).
- 3. Preparation of dental cavity of different groups of teeth on phantoms or extracted teeth.

- 4. Impose devitalizing paste.
- 5. Impose hermetic bandage.
- 6. Conduct the mouth of the expansion of root canals.
- 7. Conduct amputation and extirpation of pulp.
- 8. Remove putrid decay of the pulp from the root canal.
- 9. Treat the root canal by method of «Step-back» technique.
- 10. Treat the root canal by method of «Crown-down» technique.
- 11. Conduct chemical expansion of the root canal.
- 12. Conduct root canal preparation with rotary endodontic instruments.
- 13. Prepare the root canal for filling.
- 14. Seal the root canal with sealers of different groups.
- 15. Prepare the plastic not hardening filling material for temporary filling of the root canal.
- 16. Prepare the plastic hardening filling material for temporary filling of the root canal.
- 17. Seal the root canal with gutta-percha and sealer by way of central pin.
- 18. Prepare the mummified mixture and hold mummification of contents of the root canal.
- 19. Conduct silvering of root canal.
- 20. Conduct preparation of atypical cavities.
- 21. To make preparations and fixation of intracanal pin tumbler construction.
- 22. To prepare and fixing parapulpar pin tumbler construction.
- 23. Restore atypical cavities with the filling materials.

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

| N⁰ | Name of individual tasks | Number of evaluation points |
|----|--|--------------------------------|
| 1. | Participation in the competition Olympiad among Ukrainian universities | up to 10 points |
| 2. | Participation in conferences with a report | up to 10 points |
| 3. | Participation in conferences with a poster report | up to 8 points |
| 4. | Participation in conferences (confirmed by a certificate) | up to 2 points |
| 5. | Participation in competitions on professional skills | up to 10 points |
| 6. | Scientific publications (articles) | up to 8 points |
| 7. | Scientific publications (abstracts) | up to 6 points |
| 8. | Analytical review with a multimedia presentation on the topic of the section | up to 6 points |
| 9. | Production of a visual aid (stand, phantom model, etc.) | up to 8 points |

Evaluation of individual tasks of applicants

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

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

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

3.6. Rules for appealing the assessment

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

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

4. DISCIPLINE POLICY

Teacher's policy (department)

Academic expectations from students

Course requirements

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

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

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

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

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

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

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

- respect for colleagues,
- tolerance for others and their experience,
- receptivity and impartiality,

- the ability to disagree with the opinion, but to respect the personality of the opponent,

- careful argumentation of his opinion and the courage to change his position under the influence of evidence,

- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,

- mandatory acquaintance with primary sources.

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

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

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

anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

Occupational safety and health

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

Behavior in the audience

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

- leave the audience for a short time if necessary and with the permission of the teacher;

- drink soft drinks;

- take photos of presentation slides;

- take an active part in the class (see Academic expectations from students).

forbidden:

- eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- use obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

5. PLAGIARISM AND ACADEMIC INTEGRITY

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

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

- Code of Academic Integrity of KhNMU.

- Order №305 of 27.08.19 on the organization of the educational process in KhNMU.

- Order № 165 of 02.07.2020 on measures to develop the system of academic integrity in KhNMU.

- Order № 157 of 27.08.2021 on strengthening measures to comply with the principles of academic integrity in KhNMU.

6. RECOMMENDED LITERATURE

Basic

 Danylevskyy M.F., Borysenko A.V., Sidelnykova L.F., Nesyn O.F., Dikova I.H. Therapeutic dentistry. Propaedeutics of therapeutic dentistry. T.1. – 3 edition. – Kyiv: Medicine, 2017. – 360 p.

MOODLE website:

http://distance.knmu.edu.ua/course/index.php?categoryid=51 Repository website: http://repo.knmu.edu.ua/handle/123456789/189

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