

PRIVATE HIGHER EDUCATIONAL INSTITUTION  
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"  
Department of Dentistry

SYLLABUS  
EDUCATIONAL DISCIPLINE

«Pediatric therapeutic dentistry»


LEVEL OF HIGHER EDUCATION The second (master's) level

DEGREE OF HIGHER EDUCATION Master

FIELD OF KNOWLEDGE 22 Healthcare

SPECIALTY 221 Dentistry

**COURSE**   4  

Considered and approved  
at a meeting of the Department of Dentistry  
Protocol № 1 from «01» 09 2020 p.  
Acting head of the department \_\_\_\_\_  
MD, prof.  Kuts P.V.

Kiev 2020

| <b>1. General information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                  |
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| <b>Subject</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Pediatric therapeutic dentistry</b>                                                                                                           |
| <b>Lector</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Acting Head of the Department,<br>Doctor of Medical Sciences, Professor,<br>Kuts P.V.<br>Polishchuk I.S.                                         |
| <b>Teacher's e-mail</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <a href="mailto:forum-for-me@bigmir.net">forum-for-me@bigmir.net</a>                                                                             |
| <b>Discipline format</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Normative discipline.                                                                                                                            |
| <b>The volume of the discipline</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 120 hours , 4 ECTS                                                                                                                               |
| <b>Link to the distance learning site</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | maem.kiev.ua                                                                                                                                     |
| <b>Consultations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Web conferences in various programs<br>(Zoom, Skype, Myit, Jitsy, Teams,<br>Viber, Facebook, Cisco Webs).<br>Exchange tasks via e-mail, Wandrive |
| <b>2. Annotation to the course</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                  |
| <p>Module 1. "Caries, non-cariou lesions, complications of caries of temporary and permanent teeth in children: clinic, diagnosis, treatment"</p> <p>The subject of study of the discipline "Pediatric Therapeutic Dentistry" in the 4th year of study, module 1 are:</p> <ul style="list-style-type: none"> <li>- the main stages of development of temporary and permanent teeth; the influence of various factors on the processes of tooth development;</li> <li>- methods of examination of children with dental caries and its complications; the importance of additional examination methods for the diagnosis of dental caries and its complications;</li> <li>- etiology, pathogenesis, classification of dental caries in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of caries of temporary and permanent teeth in children of different ages;</li> <li>- modern filling materials, indications for use in the clinic of pediatric therapeutic dentistry; features of filling of carious cavities of different classes in temporary and permanent teeth in children with different filling materials;</li> <li>- etiology, pathogenesis, classification of pulpitis in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of pulpitis of temporary and permanent teeth in children of different ages, the choice of treatment and drugs;</li> <li>- etiology, pathogenesis, classification of periodontitis in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of periodontitis of temporary and permanent teeth in children of different ages, the choice of treatment, drugs and materials for temporary and permanent root canal obstruction;</li> <li>- etiology, pathogenesis, classification of non-cariou lesions of teeth in children. Clinical manifestations, diagnostics, differential diagnosis and treatment of acquired and congenital malformations of dental hard tissues in children of different ages, the concept of a multidisciplinary approach to the treatment of non-cariou dental lesions in children;</li> <li>- etiology, pathogenesis, classification of traumatic dental lesions in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of traumatic lesions of temporary and permanent teeth in children of different ages.</li> </ul> |                                                                                                                                                  |
| <b>3. Purpose and objectives of the course</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                  |
| <p>The purpose of teaching Module 1 "Caries, non-cariou lesions, complications of caries of temporary and permanent teeth in children: clinic, diagnosis, treatment" is:</p> <p>mastering the skills of diagnosis, differential diagnosis and treatment of caries and its complications in children of different ages on based on the study of their etiology, pathogenesis, clinical manifestations, methods diagnostics and differential diagnosis, treatment methods, selection and use of modern dental materials and medicines.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                  |

1.2 Tasks of studying the discipline "Pediatric Therapeutic Dentistry" are aimed at the formation of integrated, general and professional (special) competencies and achieve defined in the draft Standard of Higher Education of Ukraine second (master's) level of knowledge 22 - "Health" specialty 221 - "Dentistry" learning outcomes.

1. Identify and identify the leading clinical symptoms and syndromes of caries and its complications in temporary and permanent teeth in children by standard methods, using patient history, examination data, knowledge about the person, his organs and systems, to establish a probable nosological or previous clinical diagnosis:

facial asymmetry;

toothache;

pain in the soft tissues of the maxillofacial area; hyperesthesia; headache;

defects of the crown of the tooth; discoloration of teeth;

inflammatory infiltrates of the tissues of the maxillofacial area;

discoloration of the skin, mucous membranes of the mouth; changes in the shape of the teeth;

lymphadenopathy; dental plaque; fistula course;

restrictions on opening the mouth; tooth mobility.

2. Collect information about the general condition of the patient, assess the psychomotor and physical development of the child, the condition of the maxillofacial area.

3. Prescribe and analyze (mandatory and optional) additional methods of examination of children with caries and its complications in temporary and permanent teeth for differential diagnosis:

general blood test; general analysis of urine;

interpretation of radiological diagnostics of the dental-maxillary apparatus; microbiological examination of oral fluid; immunological examination;

functional diagnostics (luminescent, etc.).

4. To determine the final clinical diagnosis, adhering to ethical and legal norms, by making an informed decision and logical analysis of the obtained subjective and objective data of clinical and additional examinations, conducting differential diagnosis under the supervision of a doctor in a medical institution:

-with caries of temporary and permanent teeth; in diseases of the pulp of temporary and permanent teeth; with periodontitis of temporary and permanent teeth; at traumatic injuries of temporary and permanent teeth; - at non-carious lesions of the hard tissues of the teeth.

5. Determine the type of treatment by making an informed decision according to existing algorithms and standard schemes:

-with caries of temporary and permanent teeth;

in diseases of the pulp of temporary and permanent teeth; with periodontitis of temporary and permanent teeth;

at traumatic injuries of temporary and permanent teeth; - with non-carious lesions of the hard tissues of the teeth.

6. Carry out treatment according to existing algorithms and standard schemes under the control of the head doctor in the conditions of medical institution:

-with caries of temporary and permanent teeth;

in diseases of the pulp of temporary and permanent teeth; with periodontitis of temporary and permanent teeth; at traumatic injuries of temporary and permanent teeth; - with non-carious lesions of the hard tissues of the teeth.

7. Perform medical dental manipulations and on the basis of preliminary and / or final diagnosis of caries and its complications in temporary and permanent teeth in children:

- amputation of the pulp of temporary and permanent teeth;

- removal of dental layers;

- determination of acid resistance of enamel;

- sealing of fissures;

- diagnostic use of dyes;

- extirpation of the pulp of temporary and permanent teeth;

- electroodontodiagnostics;
  - local anesthesia in the treatment of caries and its complications;
  - deep fluoridation of hard tissues of temporary teeth;
  - application and removal of temporary seals and tight bandages;
  - imposition of a rubber dam;
  - obturation of root canals of temporary and permanent teeth;
  - filling of carious cavities of temporary and permanent teeth with different filling materials;
  - coating of teeth with therapeutic and prophylactic gels, varnishes;
  - preparation and cleaning of root canals of temporary and permanent teeth;
  - preparation of carious cavities of temporary and permanent teeth, taking into account the type of filling material;
  - professional oral hygiene;
  - direct and indirect pulp coating;
  - compilation of the algorithm of individual oral hygiene;
  - grinding and polishing of seals from all types of sealing materials.
8. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.
9. Plan and implement prevention measures to prevent the spread of dental diseases in children.

#### 4. Competencies and learning outcomes

| Learning outcomes                                                                                        | Teaching methods                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Have modern methods of prevention, diagnosis and treatment of caries and periodontal disease in children | Lectures, practices, oral interviews, tests, dialogue with applicants for higher education, creative work with the creation of multimedia presentations and their presentation, independent work with literary sources |

**Integral:**

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

**General:**

1. Ability to abstract thinking, search, analysis, synthesis; processing information from various sources, basics of evidence-based medicine.
2. Ability to lifelong learning.
3. Knowledge and understanding of the subject area and understanding of the profession.
4. Ability to implement knowledge in practice.
5. Ability to communicate orally and in writing in the state language. Ability to communicate in a foreign language.
6. Ability to effectively professional and interpersonal communication and use of information and communication technologies.
7. The ability to adapt to new conditions and situations and the ability to act autonomously in them.
8. Ability to identify and solve problems.
9. Ability to work in a team, including interdisciplinary and international.
10. Observance of deontological norms in professional activity.
11. Ability to implement a system of knowledge and practical skills to ensure a healthy lifestyle and patients.
12. Ability to self-assess their own achievements and increase their level.
13. Ability to assess the state of the environment, to help eliminate its negative effects on health.
14. Ability to act socially responsible and civic conscious.
15. Ability to organize legal support and management of professional activities.
16. Leadership in the development and implementation of innovations and their use in professional activities.
17. The ability to exercise their rights and responsibilities as a member of society, to realize

the need for its sustainable development, the rule of law.

18. The ability to preserve and multiply moral, cultural, scientific values and achievements of society.

Special (professional, subject):

1. Ability to collect medical information about the child and analyze clinical data on caries and its complications.

2. Ability to interpret the results of laboratory and instrumental studies for the differential diagnosis of caries and its complications.

3. Ability to diagnose: to determine the preliminary, clinical, final, concomitant diagnosis of caries and its complications.

4. Ability to plan and implement measures for the prevention of dental diseases, including dental caries.

5. Ability to design the process of providing medical care - to determine the approaches, plan, types and principles of treatment of caries and its complications in children.

6. The ability to determine a rational diet in the treatment of caries and its complications in children.

7. Ability to determine the tactics of treatment of children with caries and its complications and concomitant somatic diseases.

8. Ability to perform medical and dental manipulations necessary for the treatment of caries and its complications in children ..

9. Ability to treat caries and its complications in children.

10. Ability to organize and conduct screening examinations among children to identify risk groups for caries.

11. Ability to assess the impact of the environment on the health of the population and the peculiarities of caries and its complications in children ..

12. Ability to maintain regulatory medical records.

13. Processing of state, social and medical information.

14. Ability to organize and conduct rehabilitation activities in children with caries complications and dental injuries.

15. Ability to legally support their own professional activities.

### **5. Organization of course training**

#### *The volume of the course*

| Type of lesson    | <i>Total amount of hours</i> |
|-------------------|------------------------------|
| Lectures          | 10                           |
| Practical classes | 70                           |
| Independent work  | 40                           |

#### *Course signs*

|              |                                   |                           |                      |
|--------------|-----------------------------------|---------------------------|----------------------|
| Semester 7-8 | Specialty<br><u>221 Dentistry</u> | Course (year of study) -4 | Normative discipline |
|--------------|-----------------------------------|---------------------------|----------------------|

#### *Course thematics*

### **THEMATIC PLAN OF LECTURES**

#### **in the discipline of therapeutic dentistry for children**

#### **For 4th year students of the 7th semester**

#### **Module №1. Caries, non-cariou lesions, complications of caries of temporary and permanent teeth in children: diagnosis, treatment.**

| № | Topic                                                                                                                                                                                                                                                                                                                                                                                | Hours |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1 | Dental caries in children. Etiology and pathogenesis of caries. Classification. Clinic, diagnosis and treatment of caries of temporary and permanent teeth in children. Non-cariou lesions of the hard tissues of the teeth in children: hypoplasia, fluorosis. Hereditary malformations of dental hard tissues: imperfect amelogenesis, dentinogenesis, Stanton-Capdepon dysplasia. | 2     |

|   |                                                                                                                                                                                       |   |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|   | Etiology, clinic, diagnosis, differential diagnosis, treatment, prevention.                                                                                                           |   |
| 2 | Anatomy and physiology of the pulp of temporary and permanent teeth in children. Etiology and pathogenesis of pulpitis. Classification. Clinic, diagnosis and differential diagnosis. | 2 |
| 3 | Treatment of pulpitis of temporary and permanent teeth in children.                                                                                                                   | 2 |
|   | Total                                                                                                                                                                                 | 6 |

### Thematic plan of lectures in pediatric therapeutic dentistry 8 SEMESTER

| № | Topic                                                                                                                                                                                                                                         | Hours |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1 | Anatomical and histological structure and functions of the periodontium at different ages in children. Etiology and pathogenesis of periodontitis. Classification. Clinic, diagnosis and differential diagnosis of periodontitis in children. | 2     |
| 2 | Periodontal treatment of temporary and permanent teeth in children.                                                                                                                                                                           | 2     |
|   | Total                                                                                                                                                                                                                                         | 4     |

### THEMATIC PLAN OF PRACTICAL CLASSES for 4th year students 7 semester

| №  | Topic                                                                                                                                                                                                                                                                                                                                                                                                    | Hours |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1  | The main stages of development of temporary and permanent teeth. Terms of bookmarking, mineralization, eruption and formation of temporary and permanent teeth in children. Identification of factors influencing the processes of tooth development in children.                                                                                                                                        | 3     |
| 2  | Caries of temporary teeth in children. Regularities of clinical manifestations and course. Diagnosis, differential diagnosis, treatment. Features of preparation and filling of carious cavities, choice of filling materials.                                                                                                                                                                           | 3     |
| 3  | Caries of permanent teeth in children. Regularities of clinical manifestations and course. Diagnosis, differential diagnosis, treatment Preparation and filling of carious cavities in various forms of caries. Choice of filling materials. General treatment of caries: planning, methods.                                                                                                             | 3     |
| 4  | Errors and complications in the treatment of caries in children of different ages. Their prevention and elimination.                                                                                                                                                                                                                                                                                     | 3     |
| 5  | Non-carious lesions of the hard tissues of the teeth in children: hypoplasia, fluorosis. Etiology, clinic, diagnosis, differential diagnosis, treatment, prevention. Hereditary defects in the development of hard tissues of the teeth: imperfect amelogenesis, dentinogenesis, Stanton-Capdepon dysplasia. Clinic, diagnosis, tactics of a pediatric dentist.                                          | 3     |
| 6  | Pulpitis of temporary teeth in children. Patterns of clinical course in children of different ages. Clinic, diagnosis, differential diagnosis, treatment. The choice of treatment for pulpitis in temporary teeth in children depending on the form of pulpitis and the stage of tooth development.                                                                                                      | 3     |
| 7  | Pulpitis of permanent teeth in children. Regularities of clinical manifestations in children of different ages. Clinic, diagnosis, differential diagnosis. The choice of method of treatment of pulpitis in permanent teeth in children depending on the form of pulpitis and the stage of tooth development. Conservative method. Indications, methods of performance, control of efficiency, forecast. | 3     |
| 8  | Treatment of pulpitis of permanent teeth in children. Vital and devital amputation and pulp extirpation. Indications, methods of execution, selection of filling materials for root fillings.                                                                                                                                                                                                            | 3     |
| 9  | Errors and complications in the treatment of pulpitis of temporary and permanent teeth in children. Their prevention and elimination.                                                                                                                                                                                                                                                                    | 3     |
| 10 | Periodontitis of temporary teeth in children. Patterns of clinical course. Diagnosis,                                                                                                                                                                                                                                                                                                                    | 3     |

|  |                                                                                                                                                                |    |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|  | radiological and differential diagnosis, treatment. Choice of treatment method. Features of endodontic interventions in temporary teeth. Forecast. Diff. Test. |    |
|  | Total                                                                                                                                                          | 30 |

**Thematic plan of practical classes in pediatric therapeutic dentistry, 8 semester**

| №  | Topic                                                                                                                                                         | Hours |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1  | Periodontitis of temporary teeth in children. Influence of periodontitis of a temporary tooth on the beginning of a permanent                                 | 3     |
| 2  | X-ray diagnosis of dental caries and its complications in children. Limits of conservative treatment temporary teeth with periodontitis.                      | 3     |
| 3  | Choosing a method of treating periodontitis of temporary teeth. Features of endodontic interventions in treatment periodontitis in temporary teeth. Forecast. | 3     |
| 4  | Errors and complications in endodontic treatment temporary teeth in children. Their prevention and elimination                                                | 3     |
| 5  | Periodontitis of permanent teeth in children. Regularities clinical course. Diagnosis, radiological and differential diagnosis.                               | 3     |
| 6  | Features of endodontic interventions in permanent teeth with an unformed root. Forecast.                                                                      | 3     |
| 7  | Features of endodontic interventions in permanent teeth with a formed root. Forecast.                                                                         | 3     |
| 8  | Traumatic lesions of temporary teeth in children. Causes, clinic, diagnosis                                                                                   | 3     |
| 9  | Features of treatment traumatic lesions of temporary teeth in children                                                                                        | 3     |
| 10 | Traumatic lesions of permanent teeth in children. Causes, clinic, diagnosis                                                                                   | 3     |
| 11 | Features of treatment of permanent traumatic lesions teeth in children.                                                                                       | 3     |
| 12 | Protection of medical history                                                                                                                                 | 3     |
| 13 | Control                                                                                                                                                       | 4     |
|    | Total                                                                                                                                                         | 40    |

**THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS (IWS)**

**Thematic plan of independent extracurricular work of students in the discipline of therapeutic dentistry for children For students 4th year 7th semester**

| № | Topic                                                                                                                                                                                                   | Hours     | Types of control       |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------|
| 1 | 1 Independent elaboration of topics that are not included in the classroom plan, topics 1-4                                                                                                             |           |                        |
|   | 1. Modern views on the mechanism of dental caries. Development of a film about the etiopathogenesis of caries with the help of modern computer programs.                                                | <b>10</b> | Film presentation      |
|   | 2. Restoration of temporary teeth in children using standard metal crowns and celluloid caps                                                                                                            | 3         | Abstract, presentation |
|   | 3. Aesthetic restoration of permanent teeth in children with the use of modern composite materials. Optical properties of permanent teeth in children and adolescents                                   | 3         | Abstract, presentation |
|   | 4. The use of modern endodontic techniques in the treatment of complications of caries in temporary and permanent teeth in children. Machinery and manual techniques, ultrasonic and laser treatment of | 4         | Abstract, presentation |

|   |                           |    |                      |
|---|---------------------------|----|----------------------|
|   | root canals               |    |                      |
| 2 | 2 Preparation for control | 4  | Questions for credit |
|   | Total                     | 24 |                      |

**Thematic plan of independent extracurricular work of students in the discipline of therapeutic dentistry for children For students 4th year 8th semester**

| № | Topic                                                                                                                 | Hours | Types of control       |
|---|-----------------------------------------------------------------------------------------------------------------------|-------|------------------------|
| 1 | Independent elaboration of topics that are not included in the classroom plan, topics 1-2                             | 6     |                        |
|   | Filling of root canals of permanent teeth in children with the use of heated and thermoplasticized gutta-percha       | 3     | Abstract, presentation |
|   | Application of materials Prorut MTA, bioceramics at endodontic interventions in permanent teeth with an unformed root | 3     | Abstract, presentation |
| 2 | Writing a medical history                                                                                             | 6     |                        |
| 3 | Preparation for control                                                                                               | 4     | Questions for credit   |
|   | Total                                                                                                                 | 16    |                        |

**6. Course evaluation system**

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General course evaluation system | <p><b>Current control</b> is performed based on the control of theoretical knowledge, skills and abilities in practical classes. Independent study students are assessed in practical classes, and is an integral part of the final grade of the student. Current control is performed during the training sessions and aims at checking the assimilation of students learning the material. Forms of current control are:</p> <ul style="list-style-type: none"> <li>a) test tasks with a choice of one correct answer, with the definition of the correct sequence of actions, with determination of the conformity, defining the specific portion of the photo or diagram ("detection");</li> <li>b) individual oral questioning, interview;</li> <li>c) the solution of typical situational tasks;</li> <li>g) control of practical skills;</li> </ul> <p>Grades on the national scale ("excellent" - 5, "good" - 4, "satisfactory" - 3, "unsatisfactory" - 2), received by students, are displayed in the journals of attendance and academic group performance.</p> <p><b>Final control</b></p> <p>The final control is the form of a differentiated credit at the end of the 1st semester and at the end of the 2nd semester upon completion of the course of medical biology. The semester exam is a form of final control of mastering by the student of theoretical and practical material on academic discipline. The final control (exam) is carried out at the last control lesson.</p> <p>Students are admitted to the FC who have attended all the classes provided by the curriculum in the discipline and while studying the module scored the number of points not less than the minimum (<b>72 points</b>). A student who, for good or bad reasons, has missed classes, is allowed to rework academic debt for a certain period of time.</p> <p><b>Evaluation of current educational activities.</b> During the assessment of mastering each topic for the current educational activity of the student scores are set on a 4-point (national) assessment scale. This takes into account all types of work provided by the discipline program. The student must receive a score on each topic. Scores on the traditional scale are converted into points. The final assessment of the current academic activity is the arithmetic mean (the sum of scores for each lesson is divided by the number of lessons per semester) and translated into points according to <b>Table</b></p> |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

2.

**Table 2. Conversion of the average score for the current activity into a multi-point scale (for disciplines completed by diff.credit, exam)**

| 4- point scale | 120- point scale | 4- point scale | 120- point scale | 4- point scale | 120- point scale | 4- point scale | 120- point scale |
|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|
| 5              | 120              | 4,45           | 107              | 3,91           | 94               | 3,37           | 81               |
| 4,95           | 119              | 4,41           | 106              | 3,87           | 93               | 3,33           | 80               |
| 4,91           | 118              | 4,37           | 105              | 3,83           | 92               | 3,29           | 79               |
| 4,87           | 117              | 4,33           | 104              | 3,79           | 91               | 3,25           | 78               |
| 4,83           | 116              | 4,29           | 103              | 3,74           | 90               | 3,2            | 77               |
| 4,79           | 115              | 4,25           | 102              | 3,7            | 89               | 3,16           | 76               |
| 4,75           | 114              | 4,2            | 101              | 3,66           | 88               | 3,12           | 75               |
| 4,7            | 113              | 4,16           | 100              | 3,62           | 87               | 3,08           | 74               |
| 4,66           | 112              | 4,12           | 99               | 3,58           | 86               | 3,04           | 73               |
| 4,62           | 111              | 4,08           | 98               | 3,54           | 85               | 3              | <b>72</b>        |
| 4,58           | 110              | 4,04           | 97               | 3,49           | 84               | <3             | Not enough       |
| 4,54           | 109              | 3,99           | 96               | 3,45           | 83               |                |                  |
| 4,5            | 108              | 3,95           | 95               | 3,41           | 82               |                |                  |

*The maximum number of points that a student can collect for current educational activity during semester in order to be admitted to the exam is 120 points.*

*The minimum number of points that a student can collect for current educational activity during semester in order to be admitted to the exam is 72 points.*

Calculating of the number of points is based on obtained marks of student according to traditional scale while learning subject during the semester, by calculating the arithmetic mean (AM) that is rounded to two signs after comma.

**Evaluation of independent work of students.** Independent work of students, which is provided by the topic of the lesson together with the classroom work, is evaluated during the current control of the topic in the relevant lesson. Assimilation of topics that are submitted only for independent work is checked during the final module control.

**Evaluation of final control.**

**The maximum number of points that a student can score during the exam is 80 points.**

The final control is considered credited if the student scored at least 60% of the maximum amount of points (for a 200-point scale - at least **50 points**).

**Determining the number of points that a student scored in the discipline:** the number of points that a student scored in the discipline is defined as the sum of points for the current academic activity (Table1) and for the final control (diff.credit, exam) (Table 3).

**Table 3. Scale of assessment of differentiated (exam) credit:**

| Traditional scale | Points       |
|-------------------|--------------|
| «5»               | <b>70-80</b> |
| «4»               | <b>60-69</b> |
| «3»               | <b>50-59</b> |

Requirements for written work

The final written work is performed in the form of a test.

Practical classes

Classroom work

***The 1st semester***

Classroom work - score from 2 to 5 for each topic.

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| <p><i>Differentiated credit (semester control)</i> Semester control at the end of the 1st semester is provided in the form of Differentiated credit. (Table 2) Provides a final grade on a 120-point scale as the sum of grades for the current control of knowledge (oral examination, written survey, Practical work, abstracts). Semester control includes control of theoretical and practical training.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p>Amount: minimum <math>72 + 50 = 122</math>, maximum <math>120 + 80 = 200</math></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p><b><i>The 2nd semester</i></b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>Classroom work - score from 2 to 5 for each topic.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>Final module control is evaluated from 50 to 80 points and consists of:<br/> Test control - 40 tests = 40 points (1 point for the correct answer to 1 test).<br/> Answer to 2 theoretical questions of 20 points for each = 40 points. Amount: 80.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>Amount: minimum <math>72 + 50 = 122</math>, maximum <math>120 + 80 = 200</math></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p style="text-align: center;"><b>The list of theoretical questions to prepare students for the exam.</b></p> <p>Content module №1. “Hard tissue lesions of temporary and permanent teeth in children: caries, enamel hypoplasia, fluorosis, hereditary malformations: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment ”.</p> <p>1. Tooth development. Sources of tooth tissue development in embryogenesis. The mechanism of dentin and enamel formation. 2. Stages of development of temporary teeth. 3. Stages of development of permanent teeth. 4. Terms of eruption and formation of roots of temporary teeth. Signs of physiological eruption. 5. Terms of eruption and root formation of permanent teeth. 6. X-ray stages of root formation of a permanent tooth. Their characteristics. 7. Types of resorption of the roots of temporary teeth by TF Vinogradova. Their radiological characteristics. 8. Anatomical structure of temporary teeth. Histological structure of hard tissues of temporary teeth. 9. Anatomical structure of permanent teeth in children. Anatomical and histological features of the structure of permanent teeth with unformed root. 10. Stages of preparation of a carious cavity. Preparation tools and their selection. Features of preparation of carious cavities of I-B classes in temporary and permanent teeth depending on the type of filling material. 11. Preparation and filling of carious cavities of the I class in temporary and permanent teeth at children. 12. Preparation and filling of carious cavities of class II in temporary and permanent teeth in children. Restore contact point. 13. Preparation and filling of carious cavities of III class in temporary and permanent teeth in children. 14. Preparation and filling of carious cavities of class IV in temporary and permanent teeth in children. 15. Preparation and filling of carious cavities of V class in temporary and permanent teeth in children. 16. Classification of filling materials. The choice of dental materials for the treatment of caries in permanent teeth in children. 17. Zinc-phosphate, silicate and silico-phosphate cements. Composition, basic physical and chemical properties, indications for use in temporary and permanent teeth. Cooking and filling techniques. 18. Silver amalgam. Composition, basic physical and chemical properties, indications for use in temporary and permanent teeth. Cooking and filling techniques. 19. Glass ionomer cements. Composition, basic physical and chemical properties, indications for use in temporary and permanent teeth in children. Cooking and filling techniques. 20. Composite materials of chemical hardening. Types, basic physical and chemical properties, indications for use in temporary and permanent teeth in children. Cooking and filling techniques. 21. Photopolymer composite materials. Types, basic physical and chemical properties, indications for use in temporary and permanent teeth in children. Filling technique. Stages of filling permanent teeth in children. 22. Compomers. Basic physical and chemical properties, indications for use in temporary and permanent teeth in children. Cooking and filling techniques. 23. Etiology and pathogenesis of dental caries. General and local cariogenic factors. 24. Dental plaque. Its structure, mechanisms of formation, effect on tooth enamel. 25. Tooth enamel. Its age features, the relationship of the structure of the enamel with the clinical manifestations of dental caries in children. 26. The mechanism of enamel demineralization. Pathomorphological changes in the enamel in acute initial caries. 27. Pathomorphological changes in the dentin due to carious lesions. 28. Classification of dental</p> |

caries. Evaluation of the activity of the carious process in children by TF Vinogradova. 29. Clinic, diagnosis and differential diagnosis of caries of temporary teeth at the stage of root formation. 30. Clinic, diagnosis and differential diagnosis of caries of temporary teeth at the stage of the formed root. 31. Clinic, diagnosis and differential diagnosis of caries of temporary teeth at the stage of root resorption. 32. Impregnation method of treatment of caries of temporary teeth. Indications, method of execution. The mechanism of action of silver nitrate on the hard tissues of the teeth. 33. Treatment of caries of temporary teeth by preparation and filling. Modern techniques of preparation of temporary teeth (including including ART-technique, technique of chemical-mechanical removal of carious dentin). 34. Modern filling materials used in the treatment of caries of temporary teeth. Their choice depends on the stage of tooth development. 35. Clinic, diagnosis and differential diagnosis of caries of permanent teeth at the stage of unformed root. 36. Clinic, diagnosis, differential diagnosis and treatment of acute primary caries of permanent teeth in children. Clinic, diagnosis and differential diagnosis and treatment of superficial caries of permanent teeth in children. 37. Clinic, diagnosis and differential diagnosis and treatment of secondary caries of permanent teeth in children. 38. Clinic, diagnosis and differential diagnosis and treatment of deep caries of permanent teeth in children. 39. Therapeutic and insulating pads used in the treatment of dental caries in children. Types, properties, indications for use. 40. Differential diagnosis of caries and its complications in permanent teeth in children. 41. Treatment of acute initial caries of permanent teeth in children (remineralizing therapy, deep fluoridation). Methods, drugs, mechanism of their action. Efficiency criteria. 42. The choice of filling materials in the treatment of caries of permanent teeth in children at different ages. 43. Treatment of acute deep caries in temporary and permanent teeth in children. Methods, choice of drugs, mechanism of their action. 44. Decompensated form of dental caries in children. Causes of development, diagnosis, tactics of pediatric dentist. Treatment plan. 45. General treatment of dental caries in children. Indications for use, characteristics of drugs used. 46. Prophylactic filling in the treatment of caries of permanent teeth in children. Methods of execution and dental materials used. 47. Errors and complications in the treatment of dental caries in children. Their prevention and elimination. 48. Classification of non-carious lesions of the teeth according to MI Groshikov, TF Vinogradova. 49. Systemic hypoplasia of the enamel. Causes of development. Clinic, diagnosis, differential diagnosis, treatment. 50. Local hypoplasia of enamel. Causes of development. Clinic, diagnosis, differential diagnosis, treatment and prevention. 51. Fluorosis. Causes of development. Classification of fluorosis. Characteristics of the main clinical forms of fluorosis. Treatment and prevention. 52. Hereditary defects in the development of hard tissues of the teeth: imperfect amelogenesis, imperfect dentinogenesis, Staunton-Capdepon syndrome. Clinic, diagnosis, treatment tactics. 53. Differential diagnosis of the initial forms of caries, hypoplasia and fluorosis of permanent teeth in children.

Content module № 2. "Pulpitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention."

1. Development and anatomical and histological structure of tooth pulp. 2. Morpho-functional features of the pulp structure of temporary and permanent teeth depending on the stage of tooth development. 3. Classification of pulpitis. Patterns of pulpitis of temporary and permanent teeth depending on the stage of tooth development. 4. Etiology and pathogenesis of pulpitis in children. 5. Features of the acute forms of pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, principles of treatment. 6. Chronic fibrous pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 7. Chronic gangrenous pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 8. The main methods of treatment of pulpitis in children. The choice of treatment for pulpitis in temporary and permanent teeth. 9. Devital amputation in the treatment of pulpitis of temporary teeth in children. Indications, method of execution. The mechanism of action of paraformaldehyde paste. Characteristics and mechanism of action of agents used to cover the root pulp. 10. Devital extirpation in the treatment of pulpitis of temporary teeth in children. Indications, method of

execution. Choice of material for root filling. 11. Hyperemia of the pulp of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 12. Acute limited pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 13. Acute diffuse pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 14. Acute purulent pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 15. Acute traumatic pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment, including ART-technique, technique of chemical-mechanical removal of carious dentin). 34. Modern filling materials used in the treatment of caries of temporary teeth. Their choice depends on the stage of tooth development. 35. Clinic, diagnosis and differential diagnosis of caries of permanent teeth at the stage of unformed root. 36. Clinic, diagnosis, differential diagnosis and treatment of acute primary caries of permanent teeth in children. Clinic, diagnosis and differential diagnosis and treatment of superficial caries of permanent teeth in children. 37. Clinic, diagnosis and differential diagnosis and treatment of secondary caries of permanent teeth in children. 38. Clinic, diagnosis and differential diagnosis and treatment of deep caries of permanent teeth in children. 39. Therapeutic and insulating pads used in the treatment of dental caries in children. Types, properties, indications for use. 40. Differential diagnosis of caries and its complications in permanent teeth in children. 41. Treatment of acute initial caries of permanent teeth in children (remineralizing therapy, deep fluoridation). Methods, drugs, mechanism of their action. Efficiency criteria. 42. The choice of filling materials in the treatment of caries of permanent teeth in children at different ages. 43. Treatment of acute deep caries in temporary and permanent teeth in children. Methods, choice of drugs, mechanism of their action. 44. Decompensated form of dental caries in children. Causes of development, diagnosis, tactics of pediatric dentist. Treatment plan. 45. General treatment of dental caries in children. Indications for use, characteristics of drugs used. 46. Prophylactic filling in the treatment of caries of permanent teeth in children. Methods of execution and dental materials used. 47. Errors and complications in the treatment of dental caries in children. Their prevention and elimination. 48. Classification of non-carious lesions of the teeth according to MI Groshikov, TF Vinogradova. 49. Systemic hypoplasia of the enamel. Causes of development. Clinic, diagnosis, differential diagnosis, treatment. 50. Local hypoplasia of enamel. Causes of development. Clinic, diagnosis, differential diagnosis, treatment and prevention. 51. Fluorosis. Causes of development. Classification of fluorosis. Characteristics of the main clinical forms of fluorosis. Treatment and prevention. 52. Hereditary defects in the development of hard tissues of the teeth: imperfect amelogenesis, imperfect dentinogenesis, Staunton-Capdepon syndrome. Clinic, diagnosis, treatment tactics. 53. Differential diagnosis of the initial forms of caries, hypoplasia and fluorosis of permanent teeth in children.

Content module № 3. "Pulpitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention."

1. Development and anatomical and histological structure of tooth pulp. 2. Morpho-functional features of the pulp structure of temporary and permanent teeth depending on the stage of tooth development. 3. Classification of pulpitis. Patterns of pulpitis of temporary and permanent teeth depending on the stage of tooth development. 4. Etiology and pathogenesis of pulpitis in children. 5. Features of the acute forms of pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, principles of treatment. 6. Chronic fibrous pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 7. Chronic gangrenous pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 8. The main methods of treatment of pulpitis in children. The choice of treatment for pulpitis in temporary and permanent teeth. 9. Devital amputation in the treatment of pulpitis of temporary teeth in children. Indications, method of execution. The mechanism of action of paraformaldehyde paste. Characteristics and mechanism of action of agents used to cover the root pulp. 10. Devital extirpation in the treatment of pulpitis of temporary teeth in children. Indications, method of execution. Choice of material for root filling. 11. Hyperemia of the pulp of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 12. Acute limited pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 13. Acute diffuse pulpitis of permanent

teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 14. Acute purulent pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 15. Acute traumatic pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 16. Chronic fibrous pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 17. Chronic hypertrophic pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 18. Chronic gangrenous pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 19. Pulpitis complicated by periodontitis in children. Clinic, diagnosis, differential diagnosis, treatment. 20. Biological method of treatment of pulpitis of permanent teeth in children. Indications, methods of implementation, drugs used. 21. Vital amputation in the treatment of pulpitis of permanent teeth in children. Indications, methods of performance, criteria of efficiency. Groups of drugs used in the method. 22. The method of vital extirpation in the treatment of pulpitis of permanent teeth in children. Indications, methods of execution, choice of means and method of pulp anesthesia. 23. Devital amputation in the treatment of pulpitis of permanent teeth with unformed root in children. Indications, method of execution. The choice of devitalizing agents, the mechanism of their action. 24. Devital extirpation, in the treatment of pulpitis of permanent teeth in children. Indications, method of execution. The choice of materials for root filling depending on the stage of root formation. 25. Errors and complications in the treatment of pulpitis of temporary teeth in children. Their prevention and elimination. 26. Errors and complications in the treatment of pulpitis of permanent teeth in children. Their prevention and elimination.

Content module № 3. “Periodontitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention. Acute dental trauma in children ”

1. Development, structure and functions of the periodontium. The structure of the periodontium in temporary and permanent teeth with an unformed root. 2. Growth zone. Its structure, radiological characteristics. Differential diagnosis with chronic periodontitis. 3. Etiology and pathogenesis of periodontitis of temporary and permanent teeth in children. 4. Classification of periodontitis. Regularities of periodontitis depending on the period of development of temporary and permanent teeth. 5. Chronic granulating periodontitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, choice of treatment method. 6. Exacerbation of chronic granulating periodontitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, choice of treatment method. 7. Complications of chronic periodontitis of a temporary tooth, their radiological characteristics. 8. Acute serous periodontitis of permanent teeth in children. Etiology, clinic, diagnosis, differential diagnosis, treatment. 9. Acute purulent periodontitis of permanent teeth in children. Etiology, clinic, diagnosis, differential diagnosis, treatment. 10. Acute toxic periodontitis. Causes. Clinic, diagnosis, differential diagnosis, treatment. 11. Exacerbation of chronic periodontitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 12. Chronic granulating periodontitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 13. Chronic granulomatous periodontitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment. 14. Chronic periodontitis in permanent teeth with incomplete root formation. Clinic, diagnosis, differential diagnosis and principles of treatment. 15. X-ray diagnosis and differential diagnosis of periodontitis of temporary and permanent teeth in children. 16. Differential diagnosis of caries and its complications in children with permanent teeth with unformed root. 17. The choice of treatment for periodontitis of temporary teeth in children. Indications and contraindications to conservative treatment. 18. Treatment of chronic periodontitis of temporary teeth in children. Features of endodontic technique in temporary teeth. 19. Treatment of exacerbation of chronic periodontitis in temporary teeth. 20. Modern endodontic instruments. Its types, purpose, rules of use. 21. Modern endodontic techniques of instrumental treatment of root canals (standard, crowdown, step-back, balanced forces). Features of endodontic interventions in permanent teeth with unformed root. 22. Characteristics of drugs for drug treatment of root canals in the treatment of periodontitis. Indications for their choice. Mechanism of action. 23.

Treatment of chronic periodontitis in permanent teeth with incomplete root formation. Methodology, efficiency control, forecast. 24. Classification of materials for root seals. Basic requirements for them. Indications for choice in the clinic of pediatric therapeutic dentistry. 25. Endodontic sealers and gutta-percha. Types, properties, indications for use. Features of root canal filling in permanent teeth with unformed root in children. 26. Methods of application of calcium hydroxide preparations in the treatment of chronic periodontitis in permanent teeth with incomplete root formation. 27. Treatment of exacerbation of chronic periodontitis of permanent teeth in children. 28. Errors and complications in the treatment of periodontitis of temporary teeth in children. Their prevention and elimination. 29. Errors and complications in the treatment of periodontitis of permanent teeth in children. Their prevention and elimination. 30. Classification of traumatic tooth injuries (according to the WHO). 31. Trauma of temporary teeth in children. Clinic, diagnosis, treatment tactics. Complications after injury of temporary teeth. 32. Uncomplicated fracture of the crown of a permanent tooth within the enamel and dentin. Clinic, diagnosis, treatment tactics. 33. Complicated fracture of the crown of a permanent tooth with the exposure of the pulp. Clinic, diagnosis, treatment tactics. 34. Fracture of the root of a permanent tooth. Clinic, diagnosis, treatment tactics. 35. Concussion, subluxation, dislocation of a permanent tooth. Clinic, diagnosis, treatment tactics.

### **The list of practical skills for final module control**

to diagnose and differentially diagnose different forms of caries of temporary teeth in children of different ages; - to treat caries of temporary teeth in children by different methods (remineralization therapy, deep fluoridation of enamel and dentin ART-technique, preparation and filling with different filling materials); - to diagnose and differentially diagnose different forms of caries of permanent teeth in children of different ages; - be able to choose filling materials for the treatment of caries and non-carious lesions of the teeth in children; - to diagnose and differentially diagnose various forms of non-carious lesions of the teeth in children of different ages; - to determine treatment tactics and treat various forms of non-carious lesions of the teeth in children of different ages.; - to carry out treatment of caries of permanent teeth in children by different methods (remineralizing therapy, deep fluoridation, preventive filling, preparation and filling with different filling materials); - prescribe general treatment of dental caries to children with decompensated caries and concomitant somatic diseases; - to diagnose and carry out differential diagnosis of different forms of pulpitis in temporary and permanent teeth in children; - choose the method of treatment of pulpitis of a temporary or permanent tooth depending on the form of pulpitis, the stage of tooth development and other factors; - to treat pulpitis in temporary and permanent teeth in children using various methods; - to diagnose and carry out differential diagnosis of different forms of periodontitis in temporary and permanent teeth in children; - choose the method of treatment of periodontitis of a temporary or permanent tooth depending on the form of periodontitis, the stage of tooth development and other factors; - to treat periodontitis in temporary and permanent teeth in children using various methods; - to diagnose various types of traumatic lesions of temporary and permanent teeth in children; - to determine treatment tactics and carry out treatment of various types of traumatic lesions of temporary and permanent teeth in children; - to interpret the data of X-ray examination for caries and its complications in children of different ages; - know the mistakes and complications that may occur during endodontic treatment in children, ways to prevent and eliminate them.

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| <b>Circumstance of admission to the final control</b> | <p>1. Semester control at the end of the 1st semester is provided in the form of a differential credit. (Table 2) Provides a final score on a 120-point scale as the sum of scores for the current control of knowledge (oral examination, written survey, tests, verification of identification of micropreparations, abstracts), the results of 2 content modules.</p> <p>2. Students are allowed to take the differentiated credit, exam only if there is no debt for the implementation of the curriculum.</p> |
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### **7. Course policy**

The organization of the educational process is carried out with the use of the European Credit Transfer System (ECTS) to assess student performance. The points gained in the current survey,

independent work and points of the final control are credited. This must take into account the student's presence in class and his activity during practical work. Inadmissible: absences and late classes; use of a mobile phone, tablet or other mobile devices during the lesson (except for the cases provided by the curriculum and methodical recommendations of the teacher); copying and plagiarism; untimely performance of the task, the presence of unsatisfactory grades for 50% or more of the submitted theoretical and practical material.

## 8. RECOMMENDED LITERATURE

### 1. Basic:

1. L.A. Khomenko, A.V. Savychuk, Ye.I. Ostapko, V.I. Shmatko, N.V. Bidenko, I.N. Golubeva, Ye.F. Kononovych, S.F. Ljubarets. Pediatric therapeutic dentistry. – Kiev. Book-plus. 2012. P. 237
2. N.I. Chukhray, E.V. Bezvushko, I.S. Dubetska-Hrabous. Preventive dentistry. Lviv, 2011. P.138
3. Edwina A.M. Kidd. Essential of dental caries. Oxford University Press. 3th edition. –2005. P. 191
4. David A. Mitchell and Laura Mitchell. Oxford handbook of clinical dentistry. 4th edition. - Oxford University Press. – 2005. P. 416
5. A. Cameron, R. Widmer. Handbook of pediatric dentistry. 4th edition. -2013. P.562
6. M.S. Duggal, M.E. Curzon, S.A. Fayle, K.J. Toumba, A.J. Robertson. Restorative techniques in pediatric dentistry. Taylor & Francis, - 2002. P. 141

### 2. Additional:

- Basics of Dentistry=Основи стоматології. Рекомендовано Міністерством охорони здоров'я України як підручник для студентів вищих медичних навчальних закладів III—IV рівнів акредитації. Маланчук В. О. та ін. 616 2018
- Infant and Young Child Nutrition (0–23 months) : recommendations=Харчування дітей перших років життя (0–23 місяців) : клінічна настанова. Катілов О. В. та ін. 64 2019
- Manual of Children's Infectious Diseases=Дитячі інфекційні хвороби. Рекомендовано вченою радою Тернопільського національного медичного університету імені І. Я. Горбачевського як навчальний посібник (протокол № 9 від 24 червня 2019 року). Федорців О. С. та ін. 440 2020
- Pediatric Physical Examination=Клінічне обстеження дитини. — 3-є вид., випр. Рекомендовано Державною установою “Центральний методичний кабінет з вищої медичної освіти МОЗ України” як навчальний посібник для студентів вищих навчальних закладів МОЗ Укр Катілов О.В. та ін. 504 2021

Lector  Polishchuk I.S.