

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

**SYLLABUS  
EDUCATIONAL DISCIPLINE**

**«Practical training»**


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

**DEGREE OF HIGHER EDUCATION** Master

**FIELD OF KNOWLEDGE** 22 Healthcare

**SPECIALTY** 221 Dentistry

***COURSE*** 2

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>	
<b>Subject</b>	<b>Practical training</b>
<b>Lector</b>	Ivanna Polishchuk
<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>	90 hours , 3 ECTS
<b>Link to the distance learning site</b>	maem.kiev.ua
<b>Consultations</b>	Web conferences in various programs (Zoom, Skype, Myit, Jitsy, Teams, Viber, Facebook, Cisco Webs). Exchange tasks via e-mail, Wandrive
<b>2. Annotation to the course</b>	
<p>The direct work of the dentist involves close cooperation with the paramedics, so a doctor's perfect mastery of the skills of a nurse is a guarantee of quality and successful work. The internship (Nursing practice in dentistry) gives you the opportunity to get acquainted with the peculiarities of the dental clinic, with the responsibilities of a nurse in a dental department or office. Students have the opportunity to gain not only theoretical knowledge, but also to master the practical skills of compliance with the rules of asepsis and antiseptics, processing of dental instruments and equipment, disinfection and sterilization in a dental clinic.</p> <p>The discipline consists of 4 meaningful modules in therapeutic, pediatric, surgical, orthopedic dentistry.</p> <p>The subject of study of the discipline Industrial Practice in the 2nd year of study are:</p> <ul style="list-style-type: none"> <li>- organization of the dental department;</li> <li>- professional responsibilities of a nurse;</li> <li>- sanitary and anti-epidemic regime in dentistry;</li> <li>- the concept of asepsis and antiseptics;</li> <li>- dental tools;</li> <li>- disinfection, pre-sterilization cleaning, sterilization of dental instruments;</li> <li>- processing of dental instruments and equipment in the dental office;</li> <li>- cleaning of the premises in the dental department;</li> <li>- requirements for personal hygiene of medical staff of the dental department.</li> <li>- providing emergency care to children in the dental clinic.</li> </ul>	
<b>3. Purpose and objectives of the course</b>	
<p>the purpose of studying the discipline is to ensure the preparation of students for professional activities, work as paramedics in the dental clinic.</p> <ul style="list-style-type: none"> <li>- The main tasks of studying the discipline are:</li> </ul> <ol style="list-style-type: none"> <li>1. Demonstration and mastery of moral and deontological principles of a medical specialist and the principles of professional subordination during patient care and work in dental departments;</li> </ol> <ul style="list-style-type: none"> <li>- mastering theoretical material, demonstrating and mastering the skills of performing the necessary medical manipulations, working in a dental clinic and performing basic dental manipulations, filling out reporting documentation;</li> <li>- practical application of the basic principles of asepsis, antiseptics;</li> <li>- definition and mastering of features of application of principles of asepsis and antiseptics in dental clinic;</li> <li>- acquisition and improvement of professional skills of a nurse of a dental clinic.</li> </ul>	
<b>4. Competencies and learning outcomes</b>	
Learning outcomes	Teaching methods
Have the skills to work as a paramedic in a dental clinic.	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		
<p>(integral, general, special, competence matrix)</p> <p>integral:</p> <p>ability to solve complex problems and problems in the field of health care in the specialty "Dentistry" in professional activities or in the learning process, which involves research and / or innovation and is characterized by uncertainty of conditions and requirements; general:</p> <p>ability to apply knowledge in practical situations.</p> <p>ability to communicate in the state language both orally and in writing; ability to communicate in a second language.</p> <p>skills of using information and communication technologies.</p> <p>ability to work in a team, interpersonal skills.</p> <p>ability to act on the basis of ethical considerations (motives).</p> <p>safe activities skills.</p> <p>ability to evaluate and ensure the quality of work performed.</p> <p>special (professional, subject):</p> <p>collecting medical information about the patient's condition.</p> <p>diagnosing emergencies.</p> <p>performing medical and dental manipulations.</p> <p>determining tactics and providing emergency medical care.</p> <p>keeping medical records.</p> <p>processing of state, social and medical information.</p>			
<b>5. Organization of course training</b>			
<i>The volume of the course</i>			
Type of lesson	<b>Total amount of hours</b>		
Lectures	-		
Practical classes	15		
Independent work	75		
<i>Course signs</i>			
Semester 4	Specialty <u>221 Dentistry</u>	Course (year of study) 2	Normative discipline
<i>Course thematics</i>			
<b>THEMATIC PLAN OF PRACTICAL CLASSES</b>			
№	Topic	Hours	
Section 1. Nursing practice in therapeutic dentistry			
1	Organization of the dental department of therapeutic profile. Ethics and deontology in dentistry. Safety rules in the work of the dental department. Emergencies in the clinic of therapeutic dentistry. Medical documentation of dental reception. Dental formulas. 1	1	
	Dental tools. Rules of asepsis and antiseptics in dentistry.	1	
	Sealing materials: classification, indications for use, methods of preparation. Materials for filling root canals: classification, indications for use, cooking methods.	1	
	Total	3	
Section 2. Nursing practice in surgical dentistry			
2	Introduction to surgical dentistry. Hygiene in a surgical hospital. The work of	1	

	paramedics in the surgical department. Surgical operation in dentistry, preparation of patients for operations. Organization of work in a clean dressing room. Features of desmurgia in maxillofacial surgery, dressing material. Headbands, neck. Care for patients operated on the head and neck and oral organs.	
	Antisepsis. Care for patients with purulent pathology. Asepsis. Organization of work in the operating room. Sterilization of dressings and surgical linen. Surgical treatment of the surgeon's hands and operating field.	1
	Organization of work in the sterilization. Preparation and sterilization of surgical instruments. Sterilization of suture material.	1
	Total	3
Section 3. Nursing practice in orthopedic dentistry.		
3	Organization of the dental department of orthopedic dentistry. Professional duties of an orthopedic nurse. Disinfection and sterilization of instruments in orthopedic dentistry. Safety in the orthopedic department. Processing and disposal of disposable tools and disposable impression trays.	1
	Methods of preparation and storage of impression materials in orthopedic dentistry. Dental materials for fixing orthopedic structures. Rules for mixing cements for fixing. Imprint processing in orthopedic dentistry.	1
	Diagnosis and first aid for emergencies in the clinic of orthopedic dentistry.	1
	Total	3
Section 4. Nursing practice in pediatric dentistry.		
4	Sanitary and anti-epidemic regime in dentistry. The concept of asepsis and antiseptics. Disinfection. Pre-sterilization cleaning and sterilization. Processing of dental instruments and equipment in the dental office. Cleaning the premises in the dental department.	1
	Organization of physiotherapy room. Organization of the X-ray room	1
	Requirements for personal hygiene of medical staff of the dental department	1
	Total	3
5	Differential credit	3
	Total	15

#### Thematic plan of independent work

№	Topic	Hours
	I. Independent elaboration of topics	
	Content module 1. Nursing practice in therapeutic dentistry	
1	Organization of the dental therapeutic department profile. Ethics and deontology in dentistry	2,5
2	Safety rules in the work of the dental department. Emergencies in the clinic of therapeutic dentistry	2,5
3	Medical documentation of dental reception. Dental formulas	2,5
4	Dental tools. Rules of asepsis antiseptics in dentistry	2,5
5	Sealing materials: classification, indications for use cooking method	2,5
6	Root canal filling materials: classification, indications for use, method of preparation	2,5
7	Oral hygiene. Sanitary and educational work	2,5
	Content module 2. Nursing practice in surgical dentistry	
8	Introduction to surgical dentistry. Hygiene in a surgical hospital. The work of paramedics in the surgical department	2,5

9	Surgical operation, preparation of patients for operations	2,5
10	Organization of work in a clean dressing room. Features of desmurgia in maxillofacial surgery, dressing material. Bandages on head, neck	2,5
11	Care for patients operated on the head and neck and oral organs cavity.	2,5
12	Antiseptics. Care for patients with purulent pathology	2,5
13	Asepsis. Organization of work in the operating room. Sterilization of dressings and surgical linen. Surgical treatment of the surgeon's hands and operating field	2,5
14	Organization of work in the sterilization. Preparation and sterilization surgical instruments. Sterilization of suture material	2,5
	Content module 3. Nursing practice in orthopedic dentistry	
15	Organization of the orthopedic dental department dentistry. Professional responsibilities of a nurse orthopedic department	2,5
16	Disinfection and sterilization of instruments in orthopedic dentistry	2,5
17	Safety in the orthopedic department. Processing and disposal of disposable tools and disposable impression trays	2,5
18	Methods of preparation and storage of impression materials in orthopedic dentistry	2,5
19	Dental materials for fixing orthopedic structures. Rules of kneading of cements for fixing	2,5
20	Imprint processing in orthopedic dentistry. Technique of obtaining models in the clinic of orthopedic dentistry	2,5
21	Diagnosis and first aid in emergencies in the clinic of orthopedic dentistry	2,5
	Content module 4. Nursing practice in pediatric dentistry	
22	Sanitary and anti-epidemic regime in dentistry. The concept of asepsis and antiseptics	2,5
23	Disinfection	2,5
24	Pre-sterilization cleaning and sterilization.	2,5
25	Processing of dental instruments and equipment. in the dental office. Cleaning the premises in the dental department	
26	Organization of physiotherapy room	2,5
27	Organization of the X-ray room	2,5
28	Personal hygiene requirements for medical staff.	2,5
	Total	70
	Preparation for the differential test.	5
	Total	75

### 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> <p>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");</p> <p>b) individual oral questioning, interview;</p> <p>c) the solution of typical situational tasks;</p>
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g) control of practical skills;

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.

**Final control**

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.

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 (**72 points**). A student who, for good or bad reasons, has missed classes, is allowed to rework academic debt for a certain period of time.

**Evaluation of current educational activities.** 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 **Table 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****

	<p><b>points.</b> 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 <b>50 points</b>).</p> <p><b>Determining the number of points that a student scored in the discipline:</b> 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).</p> <p><b>Table 3. Scale of assessment of differentiated (exam) credit:</b></p> <table border="1"> <thead> <tr> <th>Traditional scale</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td>«5»</td> <td><b>70-80</b></td> </tr> <tr> <td>«4»</td> <td><b>60-69</b></td> </tr> <tr> <td>«3»</td> <td><b>50-59</b></td> </tr> </tbody> </table>	Traditional scale	Points	«5»	<b>70-80</b>	«4»	<b>60-69</b>	«3»	<b>50-59</b>
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								
<b><i>The 1st semester</i></b>									
Classroom work - score from 2 to 5 for each topic.									
<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>									
Amount: minimum $72 + 50 = 122$ , maximum $120 + 80 = 200$									
<b><i>The 2nd semester</i></b>									
Classroom work - score from 2 to 5 for each topic.									
<p>Final module control is evaluated from 50 to 80 points and consists of: Test control - 40 tests = 40 points (1 point for the correct answer to 1 test). Answer to 2 theoretical questions of 20 points for each = 40 points. Amount: 80.</p>									
Amount: minimum $72 + 50 = 122$ , maximum $120 + 80 = 200$									
<p style="text-align: center;">The list of theoretical questions to prepare students for the exam. The list of practical skills for final module control</p> <p>Content module 1. Nursing practice in therapeutic dentistry</p> <ol style="list-style-type: none"> <li>1. Prepare the workplace of the dentist for the reception of patients.</li> <li>2. To prepare the patient for dental reception.</li> <li>3. Conduct a survey of the patient and fill in the title page of the outpatient card of the dental patient.</li> <li>4. Write down the dental formula (anatomical, clinical, international (according to the WHO)).</li> <li>5. Provide emergency care to a patient who has lost consciousness.</li> <li>6. Provide emergency care to a patient with anaphylactic shock.</li> <li>7. Provide emergency care to a patient with Quincke's edema.</li> <li>8. Measure the patient's blood pressure.</li> <li>9. Provide emergency care to a patient with collapse.</li> <li>10. Provide emergency care to the patient with high blood pressure.</li> <li>11. Provide emergency care to a patient with a hypertensive crisis.</li> <li>12. Provide emergency care to a patient with bleeding.</li> <li>13. Write a prescription.</li> <li>14. Make a referral to the X-ray room.</li> </ol>									

15. Make a referral to the physiotherapy room.
16. Issue a certificate of rehabilitation of the oral cavity.
17. Prepare tools for examination of a dental patient.
18. Prepare tools for permanent and temporary sealing.
19. Prepare tools for endodontic treatment.
20. Carry out the treatment of dental equipment with a suitable disinfectant solution.
21. Disinfect dental instruments.
22. Carry out pre-sterilization preparation of dental instruments.
23. Sterilize dental instruments.
24. Prepare filling materials for the work of a dentist.
25. Carry out kneading of materials for permanent seals.
26. Carry out kneading of materials for temporary seals.
27. To mix materials for insulating and medical linings.
28. Carry out kneading of materials for filling of root canals.
29. Conduct a conversation with the patient on compliance with the rules of oral hygiene.
30. To recommend items and means of oral hygiene taking into account the dental status of the patient.
31. To teach the patient the standard method of brushing teeth.

#### Content module 2. Nursing practice in surgical dentistry

1. Demonstrate methods of prevention of the spread of nosocomial infection and measures to maintain the hygiene of the body of surgical patients and medical staff, hygiene of linen and clothing of patients.
2. Demonstrate the features of the nutrition of patients after surgery in the maxillofacial area.
3. Prepare disinfectant solutions and demonstrate the features of the treatment of medical operating room equipment.
4. Prepare disinfectant solutions and prepare used disposable tools and dressings for disposal.
5. Disinfect and sterilize used surgical instruments.
6. Demonstrate the preparation of the dressing and its placement for sterilization.
7. Prepare and demonstrate methods of application of antiseptic solutions in patients with purulent wounds.
8. To control the quality of pre-sterilization processing of instruments.
9. Prepare the necessary tools and perform on the phantom hygienic manipulations of the oral cavity in patients with pathology of the maxillofacial area.
10. Demonstrate phantom dressing of patients after surgery on the head and neck.
11. Demonstrate the treatment of the surgeon's hands.
12. Demonstrate on the phantom processing of the operating field, selecting the necessary tools.
13. Demonstrate the preparation of a sterile table.
14. Demonstrate the wearing of surgical underwear.
15. List the mandatory medical documentation of the surgical department of the clinic and maxillofacial hospital.

#### Content module 3. Nursing practice in orthopedic dentistry

1. Explain the rules of filling out medical records and journals of sterilization orthopedic dentistry
2. Explain the rules for filling out medical records and journals of sterilization orthopedic dentistry
3. Tell the orders of the SES concerning the clinic of orthopedic dentistry
4. Demonstrate mixing of glass ionomer cement, its introduction into the structure
5. Demonstrate the mixing of double hardening cement, its introduction into the orthopedic structure and its proper polymerization
6. Demonstrate kneading of gypsum dough to obtain a complete anatomical impression
7. Demonstrate kneading of alginate impression material to obtain a complete anatomical impression

8. Demonstrate mixing of base and corrective silicone mass to obtain a two-layer two-stage impression
9. Demonstrate kneading of base and correcting silicone mass to obtain a two-layer single-stage impression
10. Prepare disinfectant solutions
11. Explain the rules of disinfection and sterilization of used instruments depending on its type and purpose.
12. To control the sterilization of orthopedic instruments.
13. Demonstrate heart rate studies and blood pressure measurements in patients.

Content module 4. Nursing practice in pediatric dentistry

1. Organization of children's dental departments.
2. Mode and internal work schedule in dental departments.
3. Duties of the nurse of the dental department.
4. Ensuring sanitary and anti-epidemic regime in the premises of the dental clinic:
5. Cleaning of premises (current, general);
6. Treatment of the working surface of the doctor's dental table, dental chairs, dental units and equipment.
7. Prevention of hepatitis, HIV and other nosocomial infections transmitted parenterally:
8. Hygienic hand disinfection;
9. Surgical treatment of hands;
10. Measures for injuries, contact with blood, other biological materials of the patient;
11. Specific prevention of parenterally transmitted infections.
12. Organization and provision of disinfection and sterilization regime in the dental clinic;
13. Disinfection of medical devices (physical and chemical methods);
14. Pre-sterilization cleaning;
15. Sterilization (steam, air, chemical methods, in a glassperlene sterilizer);
16. Quality control of pre-sterilization cleaning of medical devices (azopyramine and phenolphthalein tests);
17. Processing of individual dental kits;
18. Disinfection of dental tips.
19. Provision of pre-medical emergency care.
20. Sealing materials and methods of their preparation for work.
21. Tools for examination and treatment of dental patients.
22. Materials for prints and methods of their sterilization.
23. Dental formula and its recording.
24. Techniques of radiography of teeth and jaws.
25. Physiotherapeutic procedures in dentistry (UHF therapy, UFO therapy, darsonvalization, electrophoresis of drugs, hydrotherapy).
26. Rules of registration of medical documentation (filling of the ambulatory card of the patient, filling of logs of preventive inspection, filling of statistical coupons, filling of the card of dispensary supervision).
27. Fundamentals of medical ethics and deontology.
28. Safety and fire safety measures.

**Circumstance of admission to the final control**

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.
2. Students are allowed to take the differentiated credit, exam only if there is no debt for the implementation of the curriculum.

more of the submitted theoretical and practical material.

## 8. RECOMMENDED LITERATURE

### 1. Basic:

- Dental caries. Pulpitis. Apical periodontitis = Карієс зубів. Пульпіт. Верхівковий пародонтит. Лист Міністерства охорони здоров'я України від 30 березня, 2015 № 23-01-9 / 124 Борисенко А. В. 580 с 2020
- Dental-Prosthetic technique= Зубопротезна техніка. Затверджено МОЗ України як підручник для англomовних студентів стоматологічних факультетів вищих навчальних закладів МОЗ України. Рожко М.М. 560 с 2016
- 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
- Clinical Textbook of Dental Hygiene and Therapy (2nd ed.)-Suzanne Noble, 2012, p.430
- Kaskova L.F., Berezhna O.E., Vashchenko I.U. propaedeutics of a childtherapeutic dentistry dentistry (English is my). - poltava, 2013. -140 p.
- Miloro M. Peterson's Principle of oral and maxillofacial surgery. Second Edition / M. Miloro, G.E. Ghali, P.E. Larsen, P.D. Waite. –Hamilton London, BC Decker Inc, 2004. –1502 p.

### 2. Additional:

- Practice in Patient Care at the Therapeutic Department of a Hospital: Workbook. Clinical manual=Практика догляду за пацієнтами в терапевтичному відділенні: Робочий зошит. Клінічний посібник. Для студ. мед. ЗВО. Рекомендовано вченою радою НМУ ім. О.О. В.Є. Кондратюк, В.А. Хомазюк.
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Lector  Ivanna Polishchuk