

**Odessa National Medical University**  
**Faculty of Dentistry**  
**Department of Pediatric Dentistry**  
**Syllabus**  
**From production practice**  
**Prevention of dental diseases**

<b>Amount</b>	number of ECTS credits - 1.5
<b>Semester, year of study</b>	7 semester
<b>Days, time, place</b>	according to timetable
<b>Teacher (s)</b>	Head of the department - Prof. Denga O.V., associate professors: Koval Yu.M., Konovalov M.F., Novikova Zh.O., Tsevh L.B. assistants: Tarasenko I.Yo. Shumilina K.S., Gorokhovskii V.V., Plotnikova V.G., Skorkina O.V., Yudina O.O., Gorokhivska Yu.V., Osadcha A.O.
<b>Contact phone</b>	Denga Oksana Vasylivna - Prof. Head of the Department of Pediatric Dentistry
<b>E- mail</b>	oksana.denga@onmedu.edu.ua
<b>Working space</b>	Department of Pediatric Dentistry st. Mechnikov 32 m. Odessa
<b>Consultations</b>	Every Tuesday : <i>from</i> 14.30 to 16.00 and on Saturdays: from 8.30 to 13.00. within the academic semester. During the winter holidays daily from 8.30 to 13.00.

### COMMUNICATION

Communication with students is carried out according to the schedule in the classrooms and lecture halls. In the case of distance learning, communication can take place online on the Microsoft Teams platform according to timetable.

### COURSE ANNOTATION

**Subject of study of the discipline** "Prevention of dental diseases": is the application of preventive measures aimed at maintaining a high level of dental health and disease prevention .

**Prerequisites of the course** : - "Propaedeutics of pediatric therapeutic dentistry", "Bioorganic and biological chemistry", "Physiology" and others.

**Co - requisites** - "Therapeutic dentistry", "Pharmacology" and others.

**Postrequisites** - "Pediatric Therapeutic Dentistry", "Therapeutic Dentistry" and others.

**The purpose of the course is to** consolidate practical skills within the goals of the discipline industrial practice Prevention of dental diseases identified in the educational and professional training program for masters in the specialty 221 - "Dentistry".

**Tasks of the discipline** : formation of students' knowledge, certain skills and abilities to ensure complete and timely preventive examinations and epidemiological

dental examinations of the population, identification and elimination of risk factors for dental diseases

**Expected results** As a result of studying the discipline "Prevention of dental diseases": the student must:

*From :*

- methods of dental examination of the child's mouth;
- risk factors for the development of major dental diseases; - the essence of the cariogenic situation in the oral cavity and the method of its detection;
- methods of assessing the hygienic condition of the oral cavity;
- mechanism of enamel demineralization, methods of detection of focal demineralization of enamel and its prevention;
- methods for determining the caries resistance of enamel, methods for increasing the caries resistance of enamel in the period of secondary mineralization;
- methods of endogenous prevention of dental caries with fluoride preparations, individual determination of the dose of fluoride - containing preparations, the mechanism of action of fluoride in endogenous use;
- preparations of calcium, phosphorus, vitamin D for endogenous prevention of dental caries, methods of appointment, mechanism of action;
- methods of sealing the fissures of permanent teeth in children, justification of the method, indications, characteristics of modern sealants, methods;
- measures of individual prevention of periodontal diseases, professional teeth cleaning: methods, tools;
- basic and auxiliary items for hygienic care of the oral cavity, toothbrushes: types, criteria for individual selection;
- groups of toothpastes, their composition and properties, indications for use;
- the choice of hygienic products for oral care depending on age and dental status;
- methods of hygienic education and upbringing of children of different ages in organized children's groups;
- standard method of brushing teeth, methods of controlled brushing;
- levels of implementation of dental prevention: state, group, individual, characteristics of the main measures applied at each level ;

*Be able to :*

- to determine and assess the intensity of caries in children of different ages;
- determine the Green Vermilion index and provide an interpretation of its values;
- determine the Silnes Lohe index and provide an interpretation of its values;
- determine the Fedorov- Volodkina index and provide an interpretation of its values;
- determine the PMA index and provide an interpretation of its values;
- determine the CPI index and provide an interpretation of its values;
- determine the TER and give an interpretation of its values;
- to seal the fissures ;
- cover the teeth with fluoride varnish;
- apply fluoride-containing gel;
- perform deep fluoridation of enamel;

- to remove mineralized dental plaque
- to appoint means for individual hygienic care of an oral cavity to children of preschool age;
- to appoint means for individual hygienic care of an oral cavity at multiple caries of teeth;
- to appoint means for individual hygienic care of an oral cavity;
- demonstrate the standard method of brushing teeth, conduct training in the standard method of brushing teeth;
- to carry out controlled brushing of teeth;
- to make the plan of conversation on prevention of stomatologic diseases with children of different age in the organized collectives (kindergarten, school ).

## COURSE DESCRIPTION

### Forms and methods of teaching

The course will be presented in the form of practical classes (14 hours), organization of independent work of students (31 hours). During the teaching of the discipline methods are used: lecturer's story, Power Point demonstration and explanation, conversation, analysis of new information. During practical classes, students use theoretical knowledge to perform practical tasks. It is planned to hold group consultations (1 hour per week according to the consultation schedule)

### Recommended Books:

1. Therapeutic dentistry for children Volume 1: textbook./ L.O. Khomenko, YB Tchaikovsky , NI Smolyar [etc.]; for order. prof. L.O. Khomenko. - K .: Книга плюс, 2014.- 432 с.
2. Therapeutic dentistry for children Volume 2: textbook./ L.O. Khomenko, YB Tchaikovsky , OV Savychuk [etc.]; for order. prof. L.O. Khomenko. - K .: Книга плюс, 2016.- 328 с.
3. Prevention of dental diseases: textbook . for students . higher honey. teach . bookmark . / L.F. Kaskova , LI Амосова, О.О. Karpenko [etc.]; for order. prof. L.F. Kaskova . –H .: Fakt, 2011. –392р.

### Topics of practical classes:

**Topic № 1.** Methods of preventive examination of the patient. Registration of dental status according to WHO recommendations. Epidemiology of the main dental diseases: caries, non-carious lesions, periodontal diseases and mucous membranes. Statistical methods of processing epidemiological indicators

**Topic № 2.** Methods and means of detecting non-mineralized and mineralized dental layers. their influence on the development of carious process and periodontal diseases .

**Topic № 3.** Technique of consistent professional oral hygiene. A set of tools for chemical and mechanical (manual and hardware) methods of removing dental plaque is required.

**Topic № 4.** Substantiation and practical implementation of non-invasive and invasive method of sealing fissures . Indications, contraindications , duration, choice of material. Methods for determining the depth of fissures .

**Topic №5** Technique of remineralizing therapy with the use of solutions, varnishes, gels, pastes. Electrophoresis technique ...

**Topic № 6.** Practical application of different methods of brushing teeth (standard method, method of Leonard, Bass, Phones, Reite, Smith-Bell, Charter, Stillman, brush rotation). Demonstrations of non-compliance on dental phantoms.

**Topic № 7.** Complex system of caries and teeth prevention. The main elements of the program. Criteria for evaluating the effectiveness of the program for the prevention of caries in teeth and periodontal disease .

## **ASSESSMENT.**

The current control of students at the dental departments is carried out by the heads of practice from the base.

Final control (grading test, exam) is carried out at the end of the course. Students who do not have missed classes (have completed all classes), have completed the practice program, have properly made reporting documents (Diary and Final Report) are admitted to the final control.

Form of final control

Differential credit of practice (medical) practice of 3rd year students involves the demonstration of skills and practical skills and solving situational problems.

During the differential test, the student must complete one practical skill and solve two situational problems.

Differential credit assessment: grades are set on a 4-point traditional scale.

The grade "excellent" is given in the case when the student knows the program in full, illustrates the answers with various examples; gives comprehensively accurate and clear answers without any leading questions; spreads the material without errors and inaccuracies; freely solves situational problems and performs practical skills of various degrees of complexity;

The grade "good" is given when the student knows the whole program and understands it well, answers the questions correctly, consistently and systematically, but they are not exhaustive, although the student answers additional questions without errors; solves situational problems with minor errors and performs practical skills, experiencing difficulties only in the most difficult cases;

The grade "satisfactory" is given to the student on the basis of his knowledge of the entire scope of the program on the subject and a satisfactory level of understanding. The student is able to solve simplified problems with the help of leading questions; solves a situational problem with some significant errors and performs practical

skills, experiencing difficulties in simple cases; is not able to systematically state the answer on his own, but answers the directly asked questions correctly.

The grade "unsatisfactory" is given in cases when the student's knowledge and skills do not meet the requirements of "satisfactory" mark.

### Independent work (SR) of students

Students' work consists of self-study of a certain list of topics or topics that require in-depth study. It is controlled in the form of tests. Questions related to self-study are included in the control measures. The entire volume of the SR contains tasks that require the student to work systematically independently.

## **COURSE POLICY**

The student must acquire knowledge, perform all types of educational tasks, pass all types of educational control, attend all types and forms of classes provided for in the curriculum, avoiding omissions and delays.

### *Deadline and recompilation policy.*

The student works off a missed lecture in the form of writing an abstract on the topic of the lecture. The student works off the missed practical class by answering questions of the teacher on duty (twice a week on Tuesdays and Saturdays).

### *Academic Integrity Policy*

Observance of academic integrity by students of education presupposes independent performance of educational tasks, tasks of current and final control of learning outcomes.

Unacceptable in the educational activities of participants in the educational process is the use of family or business ties to obtain a positive and higher assessment in the implementation of any form of control of learning outcomes, the use of prohibited aids or technical means (cheat sheets, headphones, telephones, smartphones, etc.); passing of procedures of control of results of training by fictitious persons.

For violation of academic integrity, the applicant may be held subject to the following academic liability:

- reduction of assessment (exam, test, etc.);
- re-passing the assessment (exam, test, etc.);
- appointment of additional control measures (additional individual tasks, tests, etc.);
- re-passing the relevant educational component of the educational program;
- deductions from the university.

### *Attendance and lateness policy.*

Absence of a student at lectures or practical classes is noted in the register of attendance in the form of a mark "ab". The student must work off the practical classes during 2 weeks.

### *Mobile devices*

The use of a smartphone, tablet or other device is allowed with the permission of the teacher.

*Behavior in the audience.* Work in a team (student group, staff of the department, employees of the clinical base of the department) is provided. The communication environment is friendly, creative, open to constructive criticism.