

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

**WORKING PROGRAM OF EDUCATIONAL DISCIPLINE**

**"Fundamentals of Dentistry"**

**LEVEL OF HIGHER EDUCATION** Second (master's) level  
**DEGREE OF HIGHER EDUCATION** Master's degree  
**BRANCH OF KNOWLEDGE** 22 Healthcare  
**SPECIALTY** 222 Medicine

Reviewed and approved  
at the meeting of the Academic Council  
Protocol No. 1, dated August 31, 2019

**Kyiv 2019**

Working program of education discipline "Fundamental of Dentistry" for the preparation of students of higher education of the second (master's) level of higher education in specialty 222 Medicine.

### INTRODUCTION

The study program of the academic discipline "Fundamentals of Dentistry" is compiled for students of the 5th year of the field of knowledge 22 "Health care" specialty 222 "Medicine"

#### Description of the academic discipline

| Name of indicators              | Field of knowledge, direction of training, educational qualification level | Characteristic academic discipline |
|---------------------------------|--|------------------------------------|
|                                 |  | Full-time teaching                 |
| Number of credits 0.5           | Branch of knowledge<br>22 "Health care"                                    | Full course                        |
|                                 | Specialty :<br>222 "Medicine"  |                                    |
| Modules 1                       | Qualifications of the educational "Master of Medicine"                     | A year of training                 |
| ECTS credits – 0.5              |  | IV                                 |
| the total number of<br>15 hours |  | Semester                           |
|                                 |  | VIII                               |
|                                 | Form of education:<br>daytime<br><br>Type of discipline:<br>mandatory      | Lectures                           |
|                                 |  | <b>0 hours</b>                     |
|                                 |  | Practical                          |
|                                 |  | <b>10 hours</b>                    |
|                                 |  | Laboratory                         |
|                                 |  | -                                  |
|                                 |  | Individual work                    |
|                                 |  | <b>5 hours</b>                     |
| Type of control:                |  |                                    |
| <b>Diff. settlement</b>         |  |                                    |

Note .

The ratio of the number of classroom hours to independent and individual work is (%):  
for full-time study - 2: 1

**Course description (abstract).** The discipline involves the study of therapeutic, orthopedic, surgical and pediatric dentistry in its main sections, with emphasis placed on the study of etiology, pathogenesis, clinics, diagnostics, emergency treatment and prevention of major and most common diseases of maxillo-facial area (MFA).

Special attention is paid to the formation of the student's skills of collecting anamnesis, conducting examination and differential diagnosis of MFA diseases with various clinical course and their complications. It is envisaged to get acquainted with the treatment-and-prophylactic measures, which are most often used in dental practice.

Studying the discipline of "fundamentals of dentistry" contributes to the formation of a holistic view of the structure and functioning of the organs of the MFA; deepening of theoretical and practical preparation, acquisition of professional practical skills for independent medical activity.

**The subject of study** of the discipline are the pathological processes of MFA, related to the

competence of therapeutic, orthopedic, surgical and pediatric dentistry, features of their clinical course, the main diagnostic and therapeutic manipulations used in the practice of dentist.

**Interdisciplinary connections:** normal anatomy, histology, normal physiology, pathological physiology, topographic anatomy and operative surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, skin and venereal diseases, nerve diseases, otolaryngology, medicine of extreme conditions.

### THE PURPOSE AND OBJECTIVES OF THE DISCIPLINE

**The purpose of teaching** the discipline (Fundamentals of Dentistry) is to provide a comprehensive and highly-specialized training of a dentist, which involves mastering the theory and practice of all sections of dentistry and basics of maxillo-facial departments (MFD), from organization of surgical department of dental clinic and maxillofacial hospital to the ability of providing urgent care in extreme conditions and qualified surgical dental and reconstructive- restoration assistance in MFD.

**The main tasks of studying the discipline** of " Fundamentals of Dentistry " are the ability to carry out examination of a dental patient, to diagnose the main symptoms and syndromes of MFA pathologies, to justify and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis of major diseases, identify and identify manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment in the clinic of surgical dentistry, identify different clinical options and complications of the most common diseases and diseases, to know measures of primary and secondary prevention of the most common dental diseases.

#### Approximate structure of the test credit

| Topic  | Lectures | Practical lessons | Independent work |
|--|----------|-------------------|------------------|
| <b>Topic 1.</b> Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention. | -        | 2                 | 1                |
| <b>Topic 2.</b> Inflammatory diseases of the maxillo-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment  | -        | 2                 | 1                |
| <b>Topic 3.</b> Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.                                   | -        | 2                 | 1                |
| <b>Topic 4.</b> Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.  | -        | 2                 | 1                |

|  |   |           |          |
|--|---|-----------|----------|
| <b>Topic 5.</b> Congenital malformations of the face. Clinical manifestations, diagnosis, principles of treatment and care. <b>Summary lesson.</b> | - | 2         | 1        |
| <b>Total credits: 0,5</b><br><b>Total hours: 15</b>  | - | <b>10</b> | <b>5</b> |

| <b>№</b>               | <b>PRACTICAL LESSONS SCHEDULE<br/>from the “Fundamentals od Dentistry”</b>   | <b>Hours</b> |
|------------------------|--|--------------|
| 1.                     | <b>Topic 1.</b> Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention. | 2            |
| 2.                     | <b>Topic 2.</b> Inflammatory diseases of the maxilla-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.   | 2            |
| 3.                     | <b>Topic 3.</b> Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.                                   | 2            |
| 4.                     | <b>Topic 4.</b> Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.  | 2            |
| 5.                     | <b>Topic 5.</b> Congenital malformations of the face. Clinical manifestations, diagnosis, principles of treatment and care. <b>Summary lesson.</b>   | 2            |
| <b>Total hours: 10</b> |  |              |

| <b>Student's independent work and it's control</b> |   |              |  |
|--|---|--------------|--|
| <b>№</b>   | <b>Topic</b>  | <b>Hours</b> | <b>Control</b>                           |
| 1  | Anaesthesia in dentistry. Local, general, potentiated.<br>General complications of local anesthesia, clinical features and urgent care. | 1            | Current control on the practical classes |

|                       |  |   |  |
|-----------------------|--|---|--|
| 2                     | Manifestations of specific inflammatory diseases and HIV/AIDS in the oral cavity. Reliable and unreliable signs of AIDS.   | 1 | Current control on the practical classes |
| 3                     | Benign and malignant tumors of the maxilla-facial area.  | 1 | Current control on the practical classes |
| 4                     | Traumatic injuries of the maxillofacial area, traumatic disease. Classification, pathogenesis, clinical flow, prognosis, peculiarities of treatment, effects of the disease. | 1 | Current control on the practical classes |
| 5                     | Factors that influence the occurrence of congenital malformations of the teeth and face.   | 1 | Current control on the practical classes |
| <b>Total hours: 5</b> |  |   |  |

### **Evaluation of the discipline**

Evaluation of current student's progress made on each practical lessons on the 4- point scale and recorded in the register of academic success. Knowledge of students are evaluated both theoretical and practical training by the following criteria:

**"Perfect"** – the student perfectly mastered theoretical material, shows the deep and comprehensive knowledge of the relevant subject or discipline, the basic provision of the basic textbook and recommended literature, have the logical thinking and make the answer, freely use the acquired theoretical knowledge in the analysis of practical material, expresses his attitude to various problems, demonstrates the high level of practical skills;

**"Good"** – the student learned theoretical material good, has the main aspects of the basic textbook and recommended literature, the knowledge set reasonable; has the practical skills, expressed own views of the problem, but assume certain inaccuracies in the logic of the theoretical contents presentation or by the analysis of the practical;

**"Satisfactory"** – the student basically mastered the theoretical knowledge of the subject or discipline, oriented in the basic textbook and recommended literature, but unconvincingly answer, confuses the notions, additional questions arouse the student uncertainty or absence of stable knowledge, answering the practical questions reveals inaccuracies in knowledge, cannot estimate the facts and events, link them to the future activities;

**"Unsatisfactory "** - the student has not mastered the subject (discipline) course material, does not know the scientific facts, definitions, hardly versed in the basic textbook and recommended literature, the scientific thinking is absent, practical skills are not formed.

### **Evaluation of student's independent study**

Material for independent work of students, which provided simultaneously with the practical classes and estimated during the current control of the theme on the appropriate practical classes.

The final control - semester credit is performed to assess learning outcomes on a national scale and ECTS scale.

The students who attended all the stipulated discipline curriculum classes and scored for current progress score not less than the minimum are allowed to the final control. For students who missed classes, with the dean permission is permitted to fulfill academic debt to the fixed period within the term.

**The semester credit** is the form of final control, which is consist in the evaluation assess of the educational material mastering exclusively on the basis of the certain types of work realizationat the practical classes. The semester test performed at the end before the examinations. Credits accept teachers who conducted practical classes in the group or hold lectures in the discipline. A student is considered to be admitted to semester control if all kinds of work provided the curriculumand the work program have been met.

The results of student work evaluation during the semester should be documented (included in the academic journal, credit - examination sheet, student Gradebook). Performed by students during the semester control tests, individual tasks are kept at the department during the year.

In the educational University process, the following grading scale are used: multimark (200 - point) scale, the traditional 4- point scale and ECST rating scale. The results are converted from one scale to another according to the following rules. In evaluating the mastering of each theme for current educational student activity the score by the 4- point scale (traditional) are set. This takes into account all types of work, provided the curriculum. The student must obtain an assessment of each theme. The forms assessment of current educational activity should include control of theoretical and practical training. Exhibited the traditional assessment scale are converted into the points.

***The maximum number of points*** that a student can collect for current educational activity at the subject's study is 200 points.

***The minimum number of points*** that a student must collect for current educational activity for enrollment courses is 120 points.

***Calculating the number of points*** is based on student evaluations received by traditional scale while learning subjects during the semester, by calculating the arithmetic mean rounded to two decimal places. The result value is converted into points by multi- scale as follows:

Table 1 Conversion of the average score for current activity in multimark scale for disciplinesending as credit ( differentiated credit )

| 4-<br>points<br>scale | 200-<br>points<br>scale | 4-<br>points<br>scale | 200-<br>points<br>scale | 4-<br>points<br>scale | 200-<br>points<br>scale | 4-<br>points   | 200-<br>points |
|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|----------------|----------------|
| 5                     | 200                     | 4.45                  | 178                     | 3.92                  | 157                     | 3.37           | 135            |
| 4.97                  | 199                     | 4.42                  | 177                     | 3.89                  | 156                     | 3.35           | 134            |
| 4.95                  | 198                     | 4.4                   | 176                     | 3.87                  | 155                     | 3.32           | 133            |
| 4.92                  | 197                     | 4.37                  | 175                     | 3.84                  | 154                     | 3.3            | 132            |
| 4.9                   | 196                     | 4.35                  | 174                     | 3.82                  | 153                     | 3.27           | 131            |
| 4.87                  | 195                     | 4.32                  | 173                     | 3.79                  | 152                     | 3.25           | 130            |
| 4.85                  | 194                     | 4.3                   | 172                     | 3.77                  | 151                     | 3.22           | 129            |
| 4.82                  | 193                     | 4.27                  | 171                     | 3.74                  | 150                     | 3.2            | 128            |
| 4.8                   | 192                     | 4.24                  | 170                     | 3.72                  | 149                     | 3.17           | 127            |
| 4.77                  | 191                     | 4.22                  | 169                     | 3.7                   | 148                     | 3.15           | 126            |
| 4.75                  | 190                     | 4.19                  | 168                     | 3.67                  | 147                     | 3.12           | 125            |
| 4.72                  | 189                     | 4.17                  | 167                     | 3.65                  | 146                     | 3.1            | 124            |
| 4.7                   | 188                     | 4.14                  | 166                     | 3.62                  | 145                     | 3.07           | 123            |
| 4.67                  | 187                     | 4.12                  | 165                     | 3.57                  | 143                     | 3.02           | 121            |
| 4.65                  | 186                     | 4.09                  | 164                     | 3.55                  | 142                     | 3              | 120            |
| 4.62                  | 185                     | 4.07                  | 163                     | 3.52                  | 141                     | Less then<br>3 | Not<br>enough  |
| 4.6                   | 184                     | 4.04                  | 162                     | 3.5                   | 140                     |                |                |
| 4.57                  | 183                     | 4.02                  | 161                     | 3.47                  | 139                     |                |                |
| 4.52                  | 181                     | 3.99                  | 160                     | 3.45                  | 138                     |                |                |
| 4.5                   | 180                     | 3.97                  | 159                     | 3.42                  | 137                     |                |                |
| 4.47                  | 179                     | 3.94                  | 158                     | 3.4                   | 136                     |                |                |

Evaluation of the disciplines (subjects) which the final control is the test is based solely on the results of current training and expressed by two points national scale: "Passed " or " Not passed ". To enroll the student must receive for current training activities at least 60 % of the maximum amount of points in the discipline (120 points). Scores are ranked on a scale of discipline ECTS (Table 3) for the above scheme.

Grade F (unsatisfactory with required repeated course) put at the test or differential credit to students who attended all subject (discipline) classes, but did not reach the minimum number of points for current educational activity. These students are not obtained credit and are not allowed to pass examinations.

Scores of discipline for students who successfully completed the program, converted into traditional 4- point scale by absolute criteria, which are listed in the table below:

Table 2

| Discipline scores  | 4 – point scale |
|--|-----------------|
| From 170 to 200 points   | 5               |
| From 140 to 169 points   | 4               |
| From 139 points to the minimal points number, which the student must score | 3               |
| Less than the minimal points number, which the student must score          | 2               |

Evaluation of ECTS to the traditional scale is not converted because the scale of ECTS and four-point scale are independent.

Objectivity evaluation of educational activities of students tested statistically (correlation coefficient between ECTS assessment and evaluation on a national scale).

Scores of students enrolled in one specialty, given the number of points gained in the discipline ranked on a scale ECTS as follows:

Table 3

| Evaluation of ECTS | Statistical index      |
|--------------------|------------------------|
| A                  | The best 10 % students |
| B                  | The next 25 % students |
| C                  | The next 30 % students |
| D                  | The next 25 % students |
| E                  | The last 10 % students |

Ranking of assigning ratings of "A", "B", "C", "D", "E" held for the students of the course who are studying for one specialty and successfully completed the study subjects. Students who received estimates FX, F (« 2») are not made to the list of students who ranked. Students with an estimate after repassing FX are automatically mark "E".

Approved:



**В.о.Пекропа /Acting Rector**

**Dmytro GOVSIEIEV**