DEPARTMENT OF PATHOLOGICAL ANATOMY №2

WORKING PROGRAM OF THE SUBJECT

«BIOPSY-SECTIONAL COURSE»

(name of a subject matter)

direction of preparation 1201 «Medicine»

(code and name of the direction of preparation)


(name of specialization)

specialization

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Kyiv - 2016
The working program is approved at a department of pathological anatomy № 2 meeting.

The protocol from "___" ____________ 2016 №_

Head at department  Prof. S. G. Gychka

_________________________  __________________
(signature)                         (surname and initials)

“____” ____________ 2016

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The working program is approved at a department of pathological anatomy № 2 meeting.

The protocol from "___" ____________ 2016 №_

Head at department  Prof. S. G. Gychka

_________________________  __________________
(signature)                         (surname and initials)

“____” ____________ 2016

Approved by the cyclic commission of NMU of O.O. Bogomolets

The protocol from "___" ____________ 2016 №_

Head of the commission  Prof. V. G. Cherkasov

_________________________  __________________
(signature)                         (surname and initials)

“____” ____________ 2016
EXPLANATORY NOTE

Work program on sectional course for the higher medical education institutions of Ukraine of III-IV accreditation levels is compiled for specialties "Stomatology" 7.110106 with the qualification of "dentist" of the direction of preparation 1101 "Medicine" based on the model program of discipline, developed by the Department of pathomorphology of the Kharkiv national medical University (valid member. IAP (USA), Professor, doctor of med. B. V. D. Markovsky), coordinated by the Director of the Central methodical office of higher medical education at MHC of Ukraine, approved by the head of the Department of education and science MHC. Study the sectional course is carried out in VI semester 3rd year of study.

The program is made according to the following regulating documents:

- Law of Ukraine “On higher education ” from 17.01.2002 №2984-III;
- The Educational and Qualification Characteristics (EQC) and the educational and professional programs (EPP) of training of specialists approved by the order MES of Ukraine from 16.04.03 on № 239 "On the statement of the making industry standards of the higher education in the direction of preparation 1101 "Medicine";
- Resolution of Cabinet Council of Ukraine from 21.01.1998 № 65 "On step education";
- Resolution of Cabinet Council of Ukraine from 07.08.1998 № 1247 "On state standards of the higher education";
- The order of MES of Ukraine from 31.06.1998 № 285 "On requirements of state standards";
- The order MHC of Ukraine from 24.02.2000 № 35 "On features of step formation of the medical and pharmaceutical direction";
- The order MHC of Ukraine from 22.03.2004 № 148 "On actions for implementation of provisions of the Bologna declaration in system of the higher medical and pharmaceutical education";
- Recommendations for development of training programs approved by order of MHC of Ukraine from 24.03.2004, № 152 "On approval of recommendations for disciplines" with changes and additions made by order of MHC of Ukraine from 12.10.2004 № 492 "On introductions of changes and additions to the recommendations for development disciplines";
- The order MHC of Ukraine from 09.07.2009 № 642 "On the organization of studying of humanitarian disciplines for the free choice of the student;
- The order MHC of Ukraine from 07.1 2.2009 № 929 "On the statement and introduction of the new curriculum of training of specialists of the educational and qualification specialist level of qualification "dentist" in higher educational institutions of IV level of accreditation in "stomatology".
- the order of MHC of Ukraine from 29.03.2010 №259 “On amendments to the MHC,
from 09.07.2009 №642 and 21.12.2009 №1150”;
• order of the MHC of Ukraine from 08.07.2010 №541 “On amendments to the curriculum training educational qualification of “specialist” qualifications “dentist” in higher educational institutions IV level of accreditation in the specialty “dentistry” approved by the order MHC of Ukraine from 07.12.2009, №929;
The main purpose of the sectional course – is the acquisition of method of clinical and anatomical analysis of biopsy, operative and sectional material and the principles of the formulation of the diagnosis, technique of dissection and registration of the pathoanatomical documentation by students. During the course students get acquainted with the structure of the pathology service, which is an integral part of the health care system in Ukraine. Pathology service aimed at improving the quality of medical-diagnostic and preventive work and improvement regulated by the order No. 81 from 12.05.1992, the MHC of Ukraine "On development and improvement of pathoanatomical service in Ukraine" and the order №179 from 29.03.2006 "On approval of the instruction on the definition of criteria for prenatal period, live births and perinatal. The procedure of registration of live births and stillbirths".

**The sectional course as an academic discipline:**

a) lays the foundations of knowledge about the organization of pathoanatomical service and its purpose;
b) is based on studying the methods of diagnostics/pathological processes and diseases by examination of biopsy samples and postoperative material (global and electronic microscopy, immunohistochemistry, autoradiography, histochemistry and cytochemistry);
c) exploring the significance of clinical and anatomic analysis as a method of knowledge of the case of appearance of disease, characteristics of its flow, causes and mechanisms of death, of their development (morphogenesis), structural bases of recovery, complications and consequence of diseases;
d) defines the structure of clinical and pathoanatomical diagnoses (underlying disease, its complications, concomitant diseases, reason of death), and concepts: combined main disease, competing, related and background with the use of the International statistical classification diseases, X revision (1995). Considering variants of pathomorphosis of diseases, arising from the conditions of human life, change, and as a result of various medical measures (pathology of therapy);
e) provides the knowledge of the morphological and clinical manifestations of diseases in all stages of their development, summarizes the skills of clinical and anatomical analysis, synthetic analysis of the diagnostic signs of diseases and their correct interpretation in cause-and-effect relationships.

**The organization of educational process is carried out by credit-modular system according to requirements of Bologna process.**
The program of discipline is structured into one module, which includes one semantic module. The volume of educational loading of students is described in credits ECTS - test credits, which are awarded to students upon successful assimilation of their appropriate module (test credit).

The working program is approved at a department meeting dated "31” august2016
The protocol № 1
Head at department of pathological anatomy № 2
doctor of medical sciences, professor. S. G. Gychka

1. The purpose and objectives of the discipline
The purpose of discipline "Biopsy-sectional course"— acquirement by students of the method of clinical and anatomical analysis of biopsy, operative and sectional material and the principles of the formulation of the diagnosis, technique of dissection and registration of the pathoanatomical documentation.

Assignment of "Biopsy-sectional course" as an academic discipline is:
1) foundation of knowledge on the organization of pathoanatomical service in Ukraine and its purpose;
2) studying the methods of diagnostics of pathological processes and diseases by examining biopsies and postoperative material (global and electronic microscopy, immunohistochemistry, autoradiography, histochemistry and cytochemistry);
3) exploring the value of clinical and anatomical analysis as a method of knowledge of the circumstances of occurrence of disease, characteristics of the flow and of the causes and mechanisms of death, of their development (morphogenesis), structural bases of convalescence, complications and consequences of diseases;
4) determination of the structure of clinical and pathoanatomical diagnoses (underlying disease, its complications, comorbidities, cause of death), as well as the concept of: combined main disease, competitive, and background combined with the use of the International classification of diseases, X revision (1995).
5) looking at the variants of pathomorphosis of diseases, resulting from the conditions of human life are changing, and as a result of various medical measures (pathology of therapy);
6) providing information on the morphological and clinical manifestations of diseases at all stages of their development, generalization of skills clinical and anatomical
analysis, synthetic analysis of the diagnostic signs of diseases and their correct interpretation in a cause-and-effect relationships;

7) defining the role of clinical-anatomical conferences, medical-control Commission and Commission to study lethal effects.

**As a result of studying of discipline the student should know:**

1) basic principles of organization of pathoanatomical service;
2) the basic legislation governing the activities of postmortem services;
3) the procedure for conducting postmortem autopsy;
4) the principles of design of the autopsy report;
5) the concept of diagnosis, principles and formulation of clinical and pathoanatomical diagnoses and their comparison;
6) basic principles of International classification of diseases, X revision;
7) principles for the preparation and holding of meetings of the medical control Commission, the Commission to study the lethal effects and clinical and anatomical conference.

8) rules of the direction and research of biopsy, surgical and cytological material.

**Can do:**

1) to detect signs of biological death;
2) to learn basic techniques of autopsy;
3) during autopsies to determine and record he found macroscopic changes in organs;
4) to hold the fence autopsia material for histological and bacteriological examination;
5) to formulate a pathoanatomical diagnosis, to carry out clinical-anatomic mapping, the date of the conclusion about the cause of death;
6) to identify the category and cause of the divergences of clinical and pathoanatomical diagnoses;
7) to determine the type and cause iatrogenic;
8) to fill in medical death certificate;
9) to hold the fence, marking and draw the direction of the histopathological study of biopsy and surgical material.

**2. Discipline program**

**Theme 1.** Tasks and methods of pathoanatomical service and its place in the system of health of Ukraine №81 from 12.05.1992, the Ministry of health of Ukraine "On development and improvement of pathoanatomical service in Ukraine" and the order №179 from 29.03.2006 "On approval of the instruction on definition of criteria for prenatal period, live births and mertinational. The procedure of registration of live and stillbirths"). Main tasks of Autopsy Bureau, Central prosecture and autopsy department of Central district hospital. Job requirements for physician pathologist and staff offices.
Equipment of autopsy department. The order of dissection of corpses in treatment-and-prophylactic institutions. The main pathological documentation.


**Theme 2.** Construction of pathoanatomical diagnosis and comparison with clinical diagnosis. The reasons of incorrect clinical diagnoses (objective, subjective). Rules and procedures for completing the medical certificate of death (fill in p.11) and the medical certificate of perinatal death (p. 21). The definition of the underlying disease, complications, concomitant diseases, the immediate causes of death. Categories of a divergence of diagnoses: R-1, R-2, R-3 (addition № 8 to the order of Ministry of health of Ukraine from 12.05.1992, № 81). The value of the divergence of diagnoses for the patient.

The autopsy of the deceased (clinical and anatomical analysis). The technique of the autopsy of the deceased. Features dissection of the corpse of the newborn. The definition of the criteria of live birth, stillbirth, perinatal period, an indication of the periods of development of the embryo, fetus and newborn child. The cleaning and embalming of the corpse. Preserving bodies after the autopsy. The study of organs after the autopsy.

The design of the pathoanatomical documentation: the Protocol of autopsy, its parts – mortem pathoanatomical diagnosis and epicrisis (comparison of clinical and pathoanatomical diagnoses, the conclusion about the cause of death, defects of diagnosis and treatment).

Work with the International classification of diseases revision (1995) according to the pathological diagnosis of the autopsy.

**Theme 3.** The definition of "pathomorphosis", "iatrogenesis" (second disease). Features of course of diseases.

The preparation and holding of meetings of the medical control Commission, the Commission to study the lethal effects and clinical and anatomical conference. General medical, precinct and specialized clinical and anatomic conferences, as the joint activities of pathologists and clinicians and their tasks. The terms and procedure of conferences. The character of the material selected for the conference. The role of the pathologist in the conduct of clinical and anatomical conferences, medical control commissions and commissions for the study of lethal effects.

**Theme 4.** The total module control.

3. Description of a subject matter
<table>
<thead>
<tr>
<th>Name of indexes</th>
<th>Branch of knowledge, direction of preparation, educational and qualification level</th>
<th>Characteristic of a subject matter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Day form of education</strong></td>
<td><strong>Evening form of education</strong></td>
</tr>
<tr>
<td><strong>Quantity of the credits</strong> – 0,75</td>
<td>direction of preparation <strong>1201 «Medicine»</strong> (code and name)</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Semester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lectures</td>
</tr>
<tr>
<td><strong>Hours for the day (or evening) form of training:</strong> classroom – 10 independent work of student 5</td>
<td>Educational and qualification level: &quot;Specialist &quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical, seminar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-contained work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individual tasks: h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type of monitoring: pass/fail exam</td>
</tr>
</tbody>
</table>
4. The structure of the discipline

<table>
<thead>
<tr>
<th>The names of the sections of the discipline and themes</th>
<th>Number of hours</th>
<th>Form of training (day form)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Including</td>
</tr>
<tr>
<td></td>
<td>Lec</td>
<td>Pr</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Discipline section 1**

**Theme 1.** Tasks and methods of pathoanatomical service and its place in the system of health of Ukraine (order №81 from 12.05.1992, the Ministry of health of Ukraine "On development and improvement of pathoanatomical service in Ukraine" and the order № 179 from 29.03.2006 "On approval of the instruction on definition of criteria for prenatal period, live births and mertinational. The procedure of registration of live births and stillbirths"). The main pathological documentation. A method of operating a biopsy and examination of material (14 types of biopsies).

3 − 2 − − − 1


3 − 2 − − − 1

**Theme 3.** The definition of "pathomorphosis", "iatrogenesis" (second disease). Features of course of diseases. The preparation and holding of meetings of the medical control

3 − 2 − − − 1
### 7. Themes of practical lessons

<table>
<thead>
<tr>
<th>№</th>
<th>THEME OF PRACTICAL LESSONS</th>
<th>the number of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tasks and methods of pathoanatomical service and its place in the system of health of Ukraine (order №81 from 12.05.1992, the Ministry of health of Ukraine &quot;On development and improvement of pathoanatomical service in Ukraine&quot; and the order № 179 from 29.03.2006 &quot;On approval of the instruction on definition of criteria for prenatal period, live births and mertinational. The procedure of registration of live births and stillbirths&quot;). The main pathological documentation. A method of operating a biopsy and examination of material (14 types of biopsies).</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>The definition of &quot;pathomorphosis&quot;, &quot;iatrogenesis&quot; (second disease). Features of course of diseases. The preparation and holding of meetings of the medical control Commission, the Commission to study the lethal effects and clinical and anatomical conference.</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Registration of postmortem documentation of the autopsy report, preparation of postmortem epicrisis.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The competitive class. The total module control.</td>
<td>3</td>
</tr>
</tbody>
</table>
8. Themes of laboratory classes

10. Individual tasks

11. Teaching methods

The system of organization of educational process on discipline "Biopsy-sectional course" encourages students systematically learn during the school year. Practical classes include:

1) research by student of the organizational structure of the pathological services and the MHC of Ukraine, which regulates its work, including knowledge of the documentation office post-mortem and pathology departments;

2) participation in the autopsy and registration of the Protocol of pathoanatomical dissection, knowledge of the procedure of filling and issue of medical certificate of death, medical certificate of perinatal death;

3) rules of research of biopsy and surgical, cytological material, the limits of biopsies, the shape of the response of the pathologist on the biopsy;

4) participation in clinical and anatomical conferences, preparing and conducting it, to know the tasks of the medical control commissions and the Commission for the study of lethal effects;

5) to know the deontological and ethical aspects in pathologoanatomy practice.

12. Control methods

Current educational activity of students is controlled on practical employments in accordance with concrete aims and during individual work of teacher with students.

It is recommended to use the following means of diagnostics of level of preparation of students: computer tests, solving situational problems, structured written work, structured according to the procedure of control of practical skills (assessment of knowledge and skills to analyze the macro- and microscopic changes of organs and systems at autopsy who died of diseases, know the types of biopsy, the ability to fill in medical death certificate and perinatal death, realization of clinical and anatomical conferences).

Evaluation of independent work of students that provided the subject next to classroom work, carried out during current control topics at the appropriate class.

Estimation of those who submitted only on independent work and not included in the topics of classroom training sessions, supervised by a final check.

To the final control allowed students who completed all types of work included in the curriculum and the study module scored points not less than the minimum.
The form of the final module control must be standardized and include control of theoretical and practical training.

13. Recalculation of the average score for current activity in multimark scale

Assessment of student discipline is rating and exhibited by multimark scale as a middle arithmetic estimation of mastering of the module and has the determination by the ECTS system and the traditional scale adopted in Ukraine.

The maximum number of points assigned to students in mastering of each module (test credit) - 200, including for current educational activity - 120 points, results of final module control - 80 points.

While mastering each topic module for current educational activity of student grades are given on a 4-point traditional scale, which are then converted into points depending on the number of topics in the module. The program was applied such a system to convert the traditional system of evaluation points:

<table>
<thead>
<tr>
<th>Traditional evaluation</th>
<th>Conversion to points</th>
</tr>
</thead>
<tbody>
<tr>
<td>“5”</td>
<td>30</td>
</tr>
<tr>
<td>“4”</td>
<td>24</td>
</tr>
<tr>
<td>“3”</td>
<td>18</td>
</tr>
<tr>
<td>“2”</td>
<td>0</td>
</tr>
</tbody>
</table>

The maximum amount that a student can score in the study module is calculated by multiplying the number of points corresponding evaluation "5" on quantity of topics in the module with addition of points for individual independent work and is 120 points.

The minimum number of points that a student can score in the study module is calculated by multiplying the number of points corresponding evaluation "3" on quantity of topics in the module with addition of points for individual independent work.

The maximum number of points for total module control is 80.

The final module control is passed if the student scored at least 48 points.

Converting the number of points on discipline evaluation on the scale ECTS and 4-ball (traditional):

The number of points in the discipline, which assessed students converted to the scale ECT the following:

<table>
<thead>
<tr>
<th>Point ECTS</th>
<th>Statistical indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The top 10% of students</td>
</tr>
<tr>
<td>B</td>
<td>The next 25% of students</td>
</tr>
<tr>
<td>C</td>
<td>The next 30% of students</td>
</tr>
<tr>
<td>D</td>
<td>The next 25% of students</td>
</tr>
<tr>
<td>E</td>
<td>The last 10% of students</td>
</tr>
</tbody>
</table>
The percentage of students is determined by sample for the students of this course within the relevant specialty.

The number of points in the discipline, which assessed students converted to 4-point scale thus:

<table>
<thead>
<tr>
<th>Point ECTS</th>
<th>Based on a 4-point scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>“5”</td>
</tr>
<tr>
<td>B, C</td>
<td>“4”</td>
</tr>
<tr>
<td>D, E</td>
<td>“3”</td>
</tr>
<tr>
<td>FX, F</td>
<td>“2”</td>
</tr>
</tbody>
</table>

Estimates of discipline FX, F ("2") are exposed students who have not passed at least one module on discipline after finish of its learning.

Estimate FX ("2") is assigned to students who scored the minimum number of points for current educational activity, but has not made final module control. They have the right to repeat the final module control not more than 2 (two) times during the winter holidays and for 2 (additional) weeks after the spring semester schedule approved by the rector.

Students who received an F rating at the end of study of discipline (did not fulfill the educational program of at least one module or have not scored for current educational activity module minimum amount points) must undergo re-training for individual curriculum.

VI. The list of questions for preparation of students for total module control
Module1:
1. The structure of pathological services.
2. The task of pathoanatomical service.
3. Methods of pathoanatomical service, its importance in the health care system
4. Pathoanatomical Department (PAD) as a basic unit of pathoanatomical service, its tasks.
7. The order of dissection of corpses in medical institutions.
8. The types of autopsies depending on the timing of their implementation.
9. Medical records on the deceased and the timing of its submission to PAD.
10. The deaths, which are not allowed to cancel the autopsy.
11. Death cases that require a forensic examination.
12. Deaths at home that require a postmortem examination.
13. Features of the dissection of corpses of persons who died from acute infectious diseases or suspicion on them.
15. The autopsy study sections, basis of preparation.
17. The basic theoretical principles that characterize the disease.
18. Morphogenesis and pathomorphism of the disease.
20. The structure of the international classification of diseases.
21. The basic principles of classification of diseases.
23. Diagnosis: definition, classification depending on the purpose, the nature of examined objects and diagnostic methods.
24. The structure and logic of the formulation of clinical and pathoanatomical diagnoses.
25. The underlying disease as the primary and main cause of death.
27. Competing diseases: examples of writing of pathoanatomical diagnoses.
28. Related and background of the disease: examples of writing of pathoanatomical diagnoses.
30. The iatrogenesis, pathology therapy.
31. Morphological manifestations of the disease, as the anatomic expression of disease.
32. Complications of the underlying disease, definition, examples of postmortem diagnoses.
33. Comorbidities, their relationship to the underlying disease and the immediate cause of death
34. Features of formulating of the pathoanatomical diagnosis in the presence of the results of surgical intervention.
35. Features the formulating of the pathoanatomical diagnosis in the presence of results of biopsies (histological examination).
36. The immediate cause of death, its justification.
38. Medical certificate of death, its value for the statistics and as a legal document.
39. The order of filling of medical certificate of death in the death of a patient in the hospital and at home.
40. Rules for filling in p. 11 of the medical death certificate.
42. Types of biopsies depending on the method of producing the material.
43. Classification of the biopsies in terms of response (issuance biopsy report).
44. Indications for the direction of the surgical specimens for histological examination.
45. Rules and directions taking of material for histological examination.
46. Features of filling by doctor the form—direction for histological examination.
47. Clinical and anatomical analysis of the results of biopsy studies.
48. The types of diagnoses that can be billed by a pathologist in the final histological examination.
49. Cytological research methods.
50. Clinical and pathological conference and their importance for improved treatment and diagnostic work of medical institutions. Basic principles of operation.
51. Main tasks of the clinical and pathoanatomical conferences.
52. The deaths, which are discussed at clinical and pathological conferences.
53. Category of divergences of clinical and pathoanatomical diagnoses.
54. Analysis of deaths, if the latter came not from the underlying disease or complications, and the use of therapeutic or diagnostic procedures.
55. Principles of mapping of clinical and pathoanatomical diagnoses.
56. Objective and subjective reasons for the discrepancy of clinical and pathoanatomical diagnoses
57. Medical Control Commission (MCC), the basic principles of their work.
58. Objectives of MCC.
59. Medical errors, their causes and sources.
60. Diagnostic errors of physicians, their causes.
61. Mistakes in the medical decomuntations.
62. Organizational errors and mistakes related to preventive measures.
63. Behavior mistakes of the medical staff in the hospital.
64. Mistakes relating to curative measures.
65. Clinical and pathoanatomical epicrisis.
66. The tanatogenesis.

VII. Forms of control
Current control is performed on each practical class according to specific purposes topic, as well as during individual work of teacher with a student for those themes which a student is working independently and not included in the structure of practical classes. Apply the following means of diagnostics of level of preparation of students: computer tests, solving situational problems; - structured written work; structured according to the procedure of control of practical skills (assessment of knowledge and skills to analyze the macro - and microscopic changes of organs and systems in the autopsy of the deceased from diseases, ability to fill in medical death certificate and perinatal death, the ability to prepare and conduct clinical-anatomical conferences, knowledge of the types of biopsy material).

The maximum number of points assigned to students in mastering of each module (test credit) - 200, including for current educational activity - 120 points, results of final module control - 80 points.

Evaluation of current training activities:

**Criteria for evaluation of knowledge students**

**Oral questioning**

4 points – oral answer of student conforms to requirements of higher education / the subject is fully disclosed, the answer is logical, evidence based: student use examples, the student answers additional questions on this topic;

2 points – oral answer of student is quite correct, sufficiently complete, the student is not able to answer additional questions.

0 points – the student doesn’t own the material or owns fragmentary the material.

**Formulation of pathoanatomical diagnosis**

6 points – student correctly formulates pathoanatomical diagnosis, divided the diseases to "basic disease", its complications and “associated diseases", the student answers additional questions.

3 points – student correctly formulates pathoanathomical diagnosis in the case of simple basic disease, but can’t formulate a diagnosis of combined basic disease. Student is not able to answer additional questions.

0 points – student can’t divide the disease to the diagnosis sections, doesn’t answer additional questions.

**The filling of the paragraph 11 of Medical certificate of death**

6 points – student correctly completes all the boxes on p. 11 of Medical certificate of death (the immediate cause of death and the previous states). The student clearly answers additional questions.
3 points – student correctly completes all the boxes on p. 11 of the Medical death certificate in the case of simple basic disease, but can’t formulate a diagnosis of combined basic disease. Student is not able to answer additional questions.

0 points - student can’t complete the boxes on p. 11 of the Medical death certificate. Student doesn’t answer additional questions.

The writing of the autopsy report
6 points – the student independently completes all sections of the autopsy report on the basis of clinical and anatomical analysis of the autopsy results, correctly identifying pathological diagnosis, describes the histological preparations, writes a postmortem epicrisis). The student clearly answers additional questions.

3 points – student completes all sections of the autopsy report with the advisory help of the teacher. Student is not able to answer additional questions.

0 points – student doesn’t orient in the writing of the autopsy report, can’t divide the disease in the diagnosis sections, can’t write pathoanatomical epicrisis, doesn’t answer additional questions.

Test control
4 points – 85-100% of correct answers;
2 points – 51-83% of correct answers;
0 points – up to 50% of correct answers.

Situational tasks
6 points – student fully and logically answer the question and additional questions of the teacher;
3 points - student fully and logically answer the question, but not answered additional questions of the teacher;
0 points – did not answer the question in full.

Individual assignments in the form:
- multimedia essays – 30сл. – 10 points
- participation in scientific conferences: 1 place – 12 points; 2nd place – 10 points; 3rd place – 8 points; participation – 5 points.
- publication of articles in scientific journals – 10 points
- production of visual AIDS/micropreparative, table - 10 points

The maximum amount that a student can score in the study module is calculated by multiplying the number of points corresponding evaluation "5" on quantity of topics in the module with addition of points for individual independent work and is 120 points.

Evaluation of independent work:
Evaluation of independent work of students that provided the subject next to classroom work, carried out during current control topics at the appropriate classroom. Assessment topics to be considered only on independent work and not included in the topics of classroom training sessions, is monitored during the final module control.

**Modular final control:**
The final module control is carried out on completion of the study all subjects module on the last control lesson from the module.

To the final control allowed students who completed all types of work included in the curriculum and the study module scored points not less than the minimum (60 points).

The form of the final module control is standardized and includes control of theoretical and practical training. The student is allowed to pass the theoretical part of the final module control during taking the practical part (execution of the autopsy report of the deceased – "pass", "fail").

During taking the practical part ability of students to execue the main sections of the autopsy of the autopsy takes into account:
- writing of pathoanatomical diagnosis;
- registration of pathoanatomical epicrisis;
- completion of medical certificate of death;
- completion of the certificate of perinatal death;
- identify reasons for the discrepancies of clinical and pathoanatomical diagnoses.

The knowledge of the students of the order and the basic methods of conducting the autopsy with the death of patients in hospital and at home, as well as the ability to issue a direction to the pathological study of biopsy and operational materialstake into account during the oral answer

**Criteria for "pass" - "fail" the practical part of final module control**

"Pass" - the student completes all of the sections of the autopsy report on the basis of clinical and anatomical analysis of the autopsy results, correctly identifying pathological diagnosis, describes the histological preparations, writes a postmortem epicrisis, focused in filling out the death certificate, gives clear answers to additional questions.
"Fail" - the student doesn’t orient in the writing of the autopsy report, can’t divide the disease in the diagnosis sections, can’t write pathoanatomical epicrisis, can’t orient in completing the death certificate, doesn’t answer additional questions.

**Evaluation criteria of students knowledge of the theoretical part of the total module control**

1. The task of clinical and anatomical analysis of autopsy (4 tasks)
   Formulation of pathoanatomical diagnosis (2 tasks)
   10 points – student correctly formulates pathoanatomical diagnosis, divides the diseases to "basic disease", its complications and “associated diseases”, names morphological manifestations and stages of development of the disease;
   9 points - the student correctly formulates pathoanatomical diagnosis, divides the disease to "basic disease", its complications and “associated diseases”, names nosologic unit in a heading of the basic disease, the student can’t list its most expressed morphological displays, the form and stage of development;
   8 points - student correctly formulates pathoanatomical diagnosis, divides the disease to "basic disease", its complications and “associated diseases”, names morphological manifestations and progression of the basic disease. However, student doesn’t orient in the peculiarities of the formulation of pathoanatomical diagnosis in the presence of surgery;
   7 points – student correctly formulates pathoanatomical diagnosis, divides the disease to "basic disease", its complications and “associated diseases". However, student doesn’t orient in the peculiarities of the formulation of pathoanatomical diagnosis in the presence of results of biopsies;
   6 points - student correctly formulates pathoanatomical diagnosis, divides the disease to "basic disease", its complications and “associated diseases”. Student names complications of the basic disease randomly, not in chronological sequence, taking into account their mutual pathogenetic relationship;
   5 points – student correctly formulates mortem diagnosis in the case of simple underlying disease, but can’t formulate the diagnosis at the combined basic disease;
   4 points – in the formulation of pathoanatomical diagnosis, the student doesn’t recognize one of the competing or one of the related diseases;
   3 points – in the formulation of pathoanatomical diagnosis, the student placed a background disease in category "comorbidities";
   2 points – during formulating a pathoanatomical diagnosis in the case of patient’s death from medical interventions, the student is not focused, when these medical actions can be regarded as the equivalent of nosologic units or as a complication of treatment;
1 points – the student names all the available patients diseases, but can’t divide them into categories;
0 points – student doesn’t provide any alternatives for pathology diagnosis.

The filling of the paragraph n. 11 of Medical certificate of death
10 points – student correctly complete all the boxes on p. 11 Medical certificate of death (the immediate cause of death and condition that it is preceded by);

8 points – student logically completes all the boxes on p. 11 Medical certificate of death, but indicates on the immediate cause of death the mechanism of death;
6 points – student correctly identifies the immediate cause of death, but the previous states fills with no chronological sequence;
5 points - student correctly completes all the boxes on p. 11 of the Medical death certificate in the case of simple basic disease, but can’t fill them at the combined basic disease;
3 points - student logically completes all the boxes on p. 11 of the Medical death certificate, but can’t complete them in the event of death of the patient not from a nosological entity (or its complications), but in the equivalent of nosologic unit (iatrogenic pathology);
1 point – student names all the states that characterize the cause of death, but can’t divide them in p. 11 of the Medical death certificate of the counts "a", "b", "c";
0 points - student doesn’t convene any options for filling in the p. 11 of the Medical death certificate.

2. The decision of situational tasks according to the type of STEP 1 (diagnosis of diseases – 5 answers from which one correct) - 10 problems (10 points).
1 point – correct diagnosis;
0 points – incorrect diagnosis.

3. Questions which include the student's knowledge of theoretical material according to the program section course 6 questions.
5 points – student's answer conforms to requirements of the higher school (the answer is logic, evidence, using examples);
4 points – student's answer conforms to requirements of the higher school (the answer is logical, evidence, but the student doesn’t use the examples;
3 points – the answer is quite correct, but the student makes minor errors, doesn’t use any examples;
2 points is assigned to the student which is not enough to know the basic material, doesn’t know details, makes significant errors;
1 point - is assigned to the student who has no systematic knowledge on the subject, makes essential mistakes;
0 points – student doesn’t learn the material.

**Individual assignments in the form:**
- multimedia essays – 30 sl. – 10 points
- participation in scientific conferences: 1 place – 12 points; 2nd place – 10 points; 3rd place – 8 points; participation – 5 points.
- publication of articles in scientific journals – 10 points
- production of visual AIDS/micropreparative, table - 10 points.

**The maximum number of points final module control is 80.**

The final module control is passed if the student scored at least 50 points.

**Evaluation of discipline:**
Based on pathomorphology exposed only to students who have enrolled module in the discipline.
**Estimation on discipline is exposed as the assessment for the module.**
Incentive points for the decision of the Academic Council may be added to the number of points on discipline to the students which have scientific publications or took the prize places for participating in the Olympics in the discipline among the Universities of Ukraine and others.

Objectivity of evaluation of educational activity of students is tested by statistical methods (correlation coefficient between the current progress and results of final module control).

**Converting the number of points on discipline evaluation on the scale ECTS and 4-ball (traditional):**
The number of points in the discipline, which assessed students converted to the scale ECT the following:

<table>
<thead>
<tr>
<th>Point ECTS</th>
<th>Statistical indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The top 10% of students</td>
</tr>
<tr>
<td>B</td>
<td>The next 25% of students</td>
</tr>
<tr>
<td>C</td>
<td>The next 30% of students</td>
</tr>
<tr>
<td>D</td>
<td>The next 25% of students</td>
</tr>
<tr>
<td>E</td>
<td>The last 10% of students</td>
</tr>
</tbody>
</table>
The percentage of students is determined by sample for the students of this course within the relevant specialty.

The selection for the students of the specialty 7.12010005 “Dentistry”, who are studying with the sectional course on a single curriculum and single educational program with the sectional course, is consists of students of these two specialties. Points of discipline that accrued to the students converted to 4-point scale thus:

<table>
<thead>
<tr>
<th>Point ECTS</th>
<th>Point based on a 4-point scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>“5”</td>
</tr>
<tr>
<td>B, C</td>
<td>“4”</td>
</tr>
<tr>
<td>D, E</td>
<td>“3”</td>
</tr>
<tr>
<td>FX, F</td>
<td>“2”</td>
</tr>
</tbody>
</table>

Estimates of discipline FX, F ("2") are exposed students who have not passed at least one module on discipline after finish of its learning.

Estimate FX ("2") is assigned to students who scored the minimum number of points for current educational activity, but has not made final module control. They have the right to repeat the final module control not more than 2 (two) times during the winter holidays and for 2 (additional) weeks after the spring semester schedule approved by the rector.

Students who received an F rating at the end of study of discipline (did not fulfill the educational program of at least one module or have not scored for current educational activity module minimum amount points) must undergo re-training for individual curriculum.

VIII. Перелік навчально-методичної літератури
5. Автандилов Г.Г. Основы патологоанатомической практики. Руководство (второе издание). - М.: РМАПО. 1998. - 505 с,
7. Балябин А.А. Методика патологоанатомического вскрытия и его
документация. - Л. Медгиз.1968.
17. Международная статистическая классификация болезней и проблем, связанных со здоровьем. 10-й пересмотр (МКБ - 10). Женева: ВОЗ, - 1,2 том Л 995.
20. Пальцев М.А., Аничков Н.М. Патологическая анатомия,- М.-: Медицина. 2001. - 526с. (т. 1); 736с. (т. И, ч.1); 680с. (т. П, ч. 2).
23. Про розвиток та удосконалення патологоанатомічної служби в Україні / Наказ Міністерства охорони здоров’я України від 02.05.92 року №81.- Київ. – 138 с.
24. Струков А.И., Серов В .В. Патологическая анатомия. М.: Медицина,
29. Хмельницкий О.К. Розенберг В. Д. Деонтология в практике патологоанатома// Арх. патол. 1990. №12., с.50-54.
30. Шлюпов В.Г. основи патологічної анатомії людини. Київ, 1999.- 496 с.
34. Methodical recommendations for teachers on the subject "Biopsy-sectional course".
35. Methodical recommendations on the subject "Biopsy-sectional course" for domestic, foreign students studing in Russian and foreign students studying in English.
36. Macro - and microslides from the Museum of the Department.
37. Tables and other demonstrative materials.

15. Recommended literature

Basic

Additional

12. Даль М.К. Формулировка клинического и патологоанатомического диагнозов. Патологоанатомическая документация. - Киев 1958. – 37с.

16. Information resources
Web sites of universities and the electronic resources of the Internet

Notes:
1. Working curriculum of the discipline is normative document of the University and outlines the specific content of the discipline, consistency, organizational forms of learning and their volume determines the form and means of current and final controls.
2. Is developed by scientific-pedagogical employees of the Department. Working curriculum discipline is considered at meetings of the Department, the respective methodical Commission of the University, signed by the head of Department, the chair of the respective methodical Commission and approved by the rector on scientifically-pedagogical work of the University.
The format A4 (210 297 mm).