

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Petro Mohyla Black Sea National University

Medical Institute

Department of Anatomy, Clinical Anatomy and Operative Surgery,
pathomorphology and forensic medicine



"I approve"
first vice-rector
Grishchenko NM
2019

CURRICULUM WORK PROGRAM

SECTIONAL COURSE

Area of knowledge 22 "Health"
Specialty 222 "Medicine"

Developer Kharchenko OV _____
Head of the Department of Developer Chernov VS _____
Guarantor of the educational program Klimenko MO _____
Director of the institute GV Grishchenko _____
Head of NMV Shkirchak SI _____

1. Description of the discipline

Name of the indicator	Characteristics of the discipline	
Name of discipline	Section course	
Area of knowledge	22 "Health"	
Specialty	222 "Medicine"	
Educational program	Medicine	
Level of higher education	Master	
The status of the discipline	Selective	
Year training course	5th	
Academic year	2020-2021	
Semester numbers:	Full-time form	Part-time form
	10th	
Total number of ECTS credits / hours	3 credits / 90 hours	
Course structure: - lectures - practical training - hours of independent work of students	Full-time form	Part-time form
	20 years	
	70 years	
Percentage of classroom load	28,5%	
The language of instruction is		
Form of intermediate control (if any)		
Form of final control	Differentiated credit - 10th semester	

Abstract of the discipline

Sectional (biopsy-sectional) course as an academic discipline: lays the foundations of knowledge about the organization of pathological service and its purpose; based on the study by students of methods, diagnosis of pathological processes and diseases by examination of biopsies and postoperative material (light and electron microscopy, immunohistochemistry, autoradiography, histochemistry and cytochemistry); studies the importance of clinical and anatomical analysis as a method of knowledge of the circumstances of diseases, features of their course, causes and mechanisms of death, their development (morphogenesis), the structural basis of recovery, complications and consequences of diseases; defines the structure of clinical and pathological diagnoses (underlying disease, its complications, comorbidities, cause of death), as well as the concept: combined underlying disease (competing, combined and background) using the International Statistical Classification of Diseases X revision (1995). Considers variants of pathomorphosis of diseases that arise in connection with changing human living conditions and as a result of various therapeutic measures (pathology of therapy); provides knowledge of morphological and clinical manifestations of diseases at all stages of their development, summarizes the skills of clinical and anatomical analysis, synthetic analysis of diagnostic signs of diseases and their correct interpretation in causal relationships.

The educational process is organized according to the credit transfer-accumulation system in accordance with the requirements of the Bologna process. The discipline is structured into one block, which includes one semantic block.

The amount of student workload is described in ECTS credits - credit credits, which are credited to students upon successful completion of the relevant block (credit). The program is designed for 90 hours. (3 credits), of which 20 hours. practical classes and 70 hours. - individual work.

2. The purpose and objectives of the discipline

The purpose of the discipline "Sectional course" follows from the goals of the educational-professional training program for graduates of medical institutions of higher education and is determined by the content of those systemic knowledge and skills that must be mastered by a master doctor. The sectional course belongs to the hospital disciplines in the system of training medical specialists in medical institutions of higher education. The knowledge gained by students is an important component of professional and practical training of a doctor, and the main task of studying this discipline is to complete the process of forming clinical and morphological thinking in students.

As a result of studying the discipline "Sectional course" the student must know:

- tasks, functions, methods of work of the pathological service, its role in the health care system;
- regulations on the organization and structure of the pathological service;
- rules of registration of the medical certificate of death, the medical certificate of perinatal death, the protocol of pathological examination;
- principles of formulation and structure of pathological diagnosis;
- methods of autopsy and features of pathological documentation in cases of death caused by therapeutic, infectious, surgical, obstetric and gynecological pathology;
- methods and features of autopsy of a dead child, fetus, newborn and registration of pathological documentation in cases of death associated with perinatal pathology;
- sequence and methods of preparation and holding of clinical and pathological conference;
- rules for sampling material for biopsy and methods of its conduct;

- be able to:

- on the basis of clinical and morphological data to conduct a clinical and anatomical analysis in a particular case of death and to formulate a pathological diagnosis;
- to issue a medical certificate of death and a medical certificate of perinatal death and to code nosological units according to the International Classification of Diseases of the 10th revision (hereinafter - ICD-10);
- to formulate a clinical and pathological epicrisis and draw up a protocol of pathological examination;
- to assess the discrepancy between clinical and pathological diagnoses;
- make a plan for a clinical and pathological conference;
- to make the plan of performance of the doctor-clinician, the pathologist, the reviewer at clinical and pathological conference in a concrete case of death;
- evaluate the results of biopsy in various pathological processes.

- master the skills:

- formation of anti-plague styling, dressing and removal of anti-plague suit;
- collection of biological material in the presence of a dead infectious disease or suspicion of it;
- preparation of biopsy (surgical) material for further morphological examination.

- have competencies:

- on the application of knowledge of the basics of pathomorphology to assess the discrepancy between clinical and pathological diagnoses;
- about the main perspective directions of development of clinical and pathological researches.

Розроблена програма відповідає *освітньо-професійній програмі (ОПП)* та орієнтована на формування *компетентностей*:

- загальні (ЗК) – ЗК1-ЗК6 ОПП:

ЗК1. Здатність до абстрактного мислення, аналізу та синтезу, здатність вчитися і оволодівати сучасними знаннями.

ЗК2. Здатність застосовувати знання у практичних ситуаціях.

ЗК3. Знання та розуміння предметної області та розуміння професійної діяльності.

ЗК4. Здатність до адаптації та дії в новій ситуації.

ЗК5. Здатність приймати обґрунтоване рішення; працювати в команді; навички міжособистісної взаємодії.

ЗК6. Здатність спілкуватися державною мовою як усно, так і письмово; здатність спілкуватись іноземною мовою.

The developed program corresponds to the educational-professional program (OPP) and is focused on the formation of competencies:

- general (ZK) - ZK1-ZK6 OPP:

ZK1. Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.

ZK2. Ability to apply knowledge in practical situations.

ZK3. Knowledge and understanding of the subject area and understanding of professional activity.

ZK4. Ability to adapt and act in a new situation.

ZK5. Ability to make an informed decision; work in a team; interpersonal skills.

ZK6. Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language.

- professional (FC) - FC18 OPP:

FC18. Ability to keep medical records.

Програмні результати навчання (ПРН) – ПРН4, ПРН12 ОПП:

Program learning outcomes (PRN) - PRN4, PRN12 OPP:

PRN4. Know the types and methods of adaptation, principles of action in a new situation. To be able to apply means of self-regulation, to be able to adapt to new situations (circumstances) of life and activity. Establish appropriate connections to achieve results. Be responsible for the timely use of self-regulatory methods.

PRN12. Evaluate information about the diagnosis in the health care facility, its unit, using a standard procedure, using knowledge about the person, his organs and systems, based on the results of laboratory and instrumental studies (according to list 4).

3. The program of the discipline

The educational process is organized according to the European Credit Transfer and Accumulation System (ECTS).

The program of the discipline "Sectional course" is structured in one module.

The structure of the discipline

Names of meaningful topics	Total hours	L	P	Ind
1	2	3	4	5
Topic 1. Introduction to the section course, purpose, tasks. Medical support of pathological service in Ukraine. Regulatory documentation. ICD-10 and others.	9	-	2	7
Topic 2. Diseases. Diseases: definition and general characteristics. Etiology of the disease. Pathogenesis of the disease. Thanatogenesis: concepts, basic options.	9	-	2	7
Topic 3. Nosology. Nosology, syndromology and nosological form and their significance at the present stage of development of medical science. The concept of the underlying disease, its complications and comorbidities.	9	-	2	7
Topic 4. The main disease: definition, characteristics. Iatrogeny: definition, classification, significance in projector work. Competing, combined and background diseases: definition, significance in projector work.	9	-	2	7
Topic 5. Complications of the underlying disease. Concomitant disease. Complications of the underlying disease: classification, place in the structure of pathological diagnosis. Medical errors: definition, causes, classification, general characteristics.	9	-	2	7
Topic 6. Clinical and pathological analysis. Hyper - and hypodiagnosis of diseases, causes, consequences. Clinical and pathological analysis of certain types of medical errors. Coincidence and discrepancy of clinical and pathological diagnoses. Principles of comparison, categories of differences.	9	-	2	7
Topic 7. Pathological examinations of deceased patients. Equipment and facilities of the pathology department and pathology offices. Significance of autopsy for medical science and practical health care. Principles of pathological examination of deceased patients. Methods of pathological autopsy: classification, general characteristics. Method of single evisceration of G. Shore's organs.	9	-	2	7
Topic 8. Features of pathological work in various pathologies. The order of registration of the autopsy report. Characteristics of the main components of the materials of their own observations. Clinical and pathological epicrisis.	9	-	2	7

Topic 9. The procedure for filling out medical certificates of death, perinatal death.	9	-	2	7
Topic 10. Clinical and pathological conferences. KIELY: organization of work, significance for the clinic.	9	-	2	7
TOGETHER	90	0	20	70

4. The content of the discipline

4.1. Lectures - curriculum is not provided.

4.2. Plan of practical classes

№	Topic	Number of hours
1	Lesson 1: Purpose and objectives of the sectional biopsy course (clinical pathology course). Significance and role of pathological service in the system of practical health care bodies. Medical support of the pathological service in Ukraine (order of the Ministry of Health of Ukraine № 81 of 12.05.92 "On the development and improvement of the pathological service in Ukraine", order of the Ministry of Health of Ukraine № 124 of 03.07.95 "On the improvement of medical records certifying cases birth and death ", implementation of the main provisions of the International Classification of Diseases. X revision and others). Organization of work and documentation of the pathology department of hospitals and pathology offices.	2
2	Lesson 2: Diseases: definition and general characteristics. Etiology of the disease. Examples (clinical and anatomical analysis). Pathogenesis of the disease. Examples (clinical and anatomical analysis). Thanatogenesis: concepts, basic options	2
3	Lesson 3: Nosology, syndromology and nosological form and their significance at the present stage of development of medical science. Diagnosis of the disease at the present stage of development of medicine. Diagnosis: definition, classification, principle of construction. The concept of the basics of the disease, its complications and comorbidities. Examples (clinical and pathological analysis)	2
4	Lesson 4: The main disease: definition, characteristics of "other diseases". Examples (clinical and pathological analysis). The main combined disease. Examples (clinical and pathological analysis). Iatrogeny: definition, classification, clinical and pathological analysis (examples), significance in prosector work. Resuscitation pathology, classification	2
5	Lesson 5: Complications of the underlying disease: classification, place in the structure of pathological diagnosis. Examples (clinical and pathological analysis). Competing, combined and background diseases: definition, significance in projector work. Examples (clinical and pathological analysis). Concomitant disease. Examples (clinical and pathological analysis). Medical errors: definition, causes, classification, general characteristics.	2
6	Lesson 6: Hyper - and underdiagnosis of diseases, causes, consequences. Clinical and pathological analysis of certain types of medical errors. Examples. Coincidence and discrepancy of clinical and pathological diagnoses. Principles of comparison, categories of differences. Cause of death: definition, classification. Examples (clinical and pathological analysis).	2
7	Lesson 7: Equipment and facilities of the pathology department and pathology offices. Significance of autopsy for medical science and practical health care. Principles of pathological examination of deceased patients.	2

	Methods of pathological autopsy: classification, general characteristics. Method of single evisceration of G. Shore's organs.	
8	Lesson 8: Features of autopsy of patients who died of plague, anthrax, pulmonary sap. Features and procedure for autopsies of young children, newborns, stillbirths, miscarriages and placentas. The order of registration of the autopsy report. Characteristics of the main components of the materials of their own observations. Clinical and pathological epicrisis.	2
9	Lesson 9: Procedure for completing and issuing medical death certificates. Determination of criteria for live birth, stillbirth, perinatal period. Features of filling out a medical certificate of perinatal death. Principles of clinical and pathological analysis.	2
10	Lesson 10: Clinical and pathological conference: organization of work, significance for the clinic. Examples (clinical and anatomical analysis). Biopsy: definition, classification, tasks of biopsy research. Organizational and methodological measures to ensure the study of biopsies. Variants of conclusions of pathohistological research.	2
	Together	20

4.3 Independent work

№	Topic	Number of hours
1	Organization of the pathological service. Work of the medical control commission (LKK) Instructions, orders and methodical letters on pathological service and morphological diagnostics. International Classification of Diseases.	7
2	<ul style="list-style-type: none"> - bases of the legislation on public health services and the directive documents defining activity of bodies and establishments of public health services, - general issues of organization of pathological anatomical service, directive, normative, methodical documents on the specialty "pathological anatomy"; - legal issues about the activities of a pathologist: - doctrine of disease, etiology, pathogenesis, nosology, organopathological, syndromic and nosological principles in the study of diseases; pathomorphosis of diseases; thanatogenesis; - comparison of clinical and pathological diagnoses, determination of the category of discrepancy; - principles of construction of the pathological diagnosis and filling of the medical certificate of death according to requirements of the International native classification of diseases; - forms and methods of sanitary education. 	7
3	Clinical and anatomical analysis of section material. Clinical and anatomical comparisons and analysis of autopsy results. ICD-10. Autopsy (clinical and anatomical analysis). Autopsy report. Clinical and pathological conferences. Medical death certificate (structure, rules of registration). Deontological aspects of the activities of clinicians and pathologists. Pathomorphosis and iatrogenesis (iatrogenic - associated with medical treatment. Iatrogenic - associated with surgical treatment. Iatrogenic - associated with resuscitation and intensive care. Iatrogenic - associated with physical treatment. Iatrogenic - pov ' associated with manipulation. Complications associated with preventive measures.)	7
4	Clinical and anatomical analysis of biopsy and surgical material. General principles of organization of research biopsy material. Methods and techniques of taking surgical material and biopsies at different localizations of the	7

	<p>pathological process. Indications for taking biopsies. Marking, fixation, delivery of biopsy material to the histopathological laboratory. Registration of documents for histological examination. Deadlines for receiving responses to surgical material and diagnostic biopsies. Urgent biopsies. The nature of the responses and conclusions to the biopsy. Issuance of responses to biopsies. Issuance of histological specimens, blocks and raw material. Storage of the archive of pathological material. Basic principles of manufacturing histological preparations. The value of immunohistochemical studies in the differential diagnosis, prognosis and selection of the optimal method of treatment.</p>	
5	<p>Sectional section of work. The order of disclosure and general techniques of opening by Apricot, Shore and other methods. Autopsy of the spinal cord, autopsy of the paranasal sinuses. Autopsy in various diseases of therapeutic, surgical profile, etc. Autopsy of newborns and stillbirths.</p> <p>Features of autopsies in quarantine and especially dangerous infections.</p> <p>Special diagnostic methods at the section table: test for air and fat embolism, test for air in the pleural cavities, autopsy if pulmonary embolism is suspected, amyloid test, tellurite test for ischemia, separate weighing of the heart (determination of the stomach).</p> <p>Preparation of smears, taking material for bacteriological examination.</p> <p>Making a pathological diagnosis:</p> <ol style="list-style-type: none"> 1) the main disease, its manifestations, complications; accompanying diseases. 2) combined underlying disease (competitive, combined, background). <p>Registration of clinical and anatomical epicrisis.</p> <p>Verification of clinical and pathological diagnoses with identification of the causes of diagnostic errors (discrepancies in diagnoses).</p> <p>Safety in the work of the pathology department.</p>	7
6	<p>Biopsy section of the work. The procedure for taking material for histological examination and sending it to the prosector.</p> <p>Reception of biopsies and registration of documentation.</p> <p>Macroscopic description, cutting of material (surgical, biopsy, including - puncture, endoscopic).</p>	7
7	<p>Histological section of the work. Fixation of material. Clipping for histological examination. Filling in celloidin, paraffin. Decalcification of the material. Work on sledding and freezing microtoms.</p> <p>Preparation of basic reagents and dyes used in histological and cytological laboratories.</p> <p>Staining of the material using the main histological and histochemical staining methods: hematoxylin-eosin; picrofuxin according to Van Gizon; on fat, elastic, iron, amyloid; CHIC reaction. Acquaintance with modern methods of morphological research: histochemistry, histoenzymochimistry, electron and luminescent microscopy, immunohistochemistry.</p> <p>Introduction to cytological diagnosis.</p> <p>Acquaintance with macro - and macro photography; preparation of microphotograms, slides. Technique of preparation of macrodrugs.</p>	7
8	<p>Preparation of reporting documentation for sections and biopsy. (Monthly, semi-annual and annual reports). Registration and storage of documentation:</p> <ol style="list-style-type: none"> 1) on the sectional section of the work. 2) on the biopsy section of the work. 3) on organizational and economic and material issues. <p>- bases of the legislation on public health services and the directive documents defining activity of bodies and establishments of public health services,</p>	7

	- general issues of organization of the pathological anatomical service in the country, directive, normative, methodical documents on the specialty "pathological anatomy"; - legal issues about the activities of a pathologist:	
9	Registration of the educational protocol of autopsy.	7
10	Preparation for differentiated credit	7
	Together	70

Typical tests to check the mastered material in practical classes (example):

1. During the autopsy revealed: the presence of blood in the stomach, small intestine, pallor of internal organs, tuberculous cavity in the apex of the right lung, right ventricular hypertrophy, reduction in the size of the liver with its deformation, large connective tissue fields and small regeneration nodes, varicose veins esophagus, aortic atherosclerosis. Formulate a pathological diagnosis. Write a medical certificate of death.

2. During the section of the deceased L. 42 years old, the pathologist found the following picture: erosive gastritis, ascites, bilateral hydrothorax, congestive renal plethora, cyanotic induration of the spleen, brown induration of the lungs, hemorrhagic infarction of the lower lobe of the right lung, muscat cirrhosis cardiosclerosis, hypertrophy of the walls of the right and left ventricles of the heart with dilation of their cavities, rheumatic heart disease; sclerosis of the mitral and aortic valves with their insufficiency and stenosis of the atrioventricular and aortic openings, fibrinous warty overlays on the valves. Formulate a pathological diagnosis. Write a medical certificate of death.

3. Patient S. 50 years old, who suffered from cancer of the body and head of the pancreas, developed mechanical jaundice due to compression of the common bile duct and purulent angiocholitis with abscess. An operation was performed on March 18, 2020 with drainage of the gallbladder. On the section of the deceased Revealed: purulent-biliary peritonitis, subphrenic abscess, melting of the tendon center of the right dome of the diaphragm, right pneumothorax with compression atelectasis of the right lung, parenchymal dystrophy of internal organs, metastases of pancreatic cancer. Formulate the correct pathological diagnosis. Write a medical certificate of death.

4. After the section of the deceased L. 49 years old, the following diagnosis was made: the main diseases were renal amyloidosis, cyanotic induration of the kidneys. Complications of the underlying disease: peripheral and cavitory edema. Concomitant diseases: atrophic gastritis, fibro-cavernous pulmonary tuberculosis with foci of draining caseous pneumonia in the lower lobes and productive acinar and nodular foci, obliteration of the pleural cavities, pneumosclerosis, pulmonary emphysema, pulmonary emphysema, chronic. Analyze this diagnosis. Formulate the correct pathological diagnosis. Write a medical certificate of death.

5. After the section of the deceased N. 48 years old, who was hospitalized in a psychiatric hospital, the following diagnosis was made: Main diseases: chronic alcoholism, brain atrophy, internal hydrocephalus, sclerosis of the meninges, significant degenerative changes in ganglion brain cells, hepatic steatosis. Complications of the underlying disease: edema and swelling of the brain and its membranes. Concomitant diseases: coronary heart disease, stenotic atherosclerosis of the coronary arteries, infarction of the posterior wall of the left ventricle, general venous plethora, pulmonary edema. Analyze the given example and formulate the correct diagnosis. Write a medical certificate of death.

4.4. Ensuring the educational process

1. Technical teaching aids: computers, multimedia projector, demonstration screen, interactive whiteboard.

2. Schemes, tables, tests, situational tasks, videos.

3. Work in the prosector.

4. Differential test questions and tickets, etc.

5. Final control

List of questions of final control (differential test)

I. Organization, tasks and structure of pathological service in the system of practical health care of Ukraine

1. Number and title of the main order of the Ministry of Health of Ukraine, which regulates the pathological service in Ukraine.
2. Name A) the purpose and B) the main tasks of the pathological service in practical health care.
3. List the institutions that make up the basic structure of the pathological service of Ukraine.
4. Name the main structural units of the pathological service in practical health care.
5. Specify the criteria for the organization of the pathology department in the medical institution.
6. The main tasks of the pathology department.
7. Basic methods of work of pathological departments (surfactants).
8. Auxiliary research methods are used in surfactants.
9. List the main responsibilities of a pathologist.
10. Name the main mandatory forms of accounting documentation for the pathology department.
11. What new forms of organization of pathological service have become widespread in recent decades?
12. Where, by whom and under what conditions is the pathology bureau (PAB) organized?
13. Where and for what purpose are created pathological anatomical educational-scientific-practical associations?
14. What structural units are included in the pathological educational-scientific-practical association?
15. The main tasks of pathological educational and practical associations.

II. Methods of pathological service. Regulations on autopsy of corpses.

Organization of work and documentation of the pathology department.

1. What does the term "autopsy" mean?
2. Give the defining concept of the essence of the autopsy.
3. What types of death do you know?
4. What is biological death?
5. Define violent death.
6. What cases of death are the subject of forensic examination? (Name the reasons for the appointment of forensic medical examination of the corpse).
7. What cases of death of patients in medical institutions are subject to forensic examination?
8. What is included in the concept of "Death suspected of violent"?
9. Give the concept of the term "Sudden Death".
10. What deaths are the subject of pathological autopsies.
11. The purpose of pathological autopsy (autopsy, section).
12. Which document regulates the procedure for sending and conducting autopsies of the dead in medical institutions?
13. Who has the right to cancel the autopsy in exceptional cases?
14. In what specific cases is it possible to cancel the autopsy?
15. How is the cancellation of the autopsy of a deceased patient in the hospital documented?

III. The procedure for dissecting the corpses of stillbirths and newborns, died in the perinatal period in medical institutions.

The order of disclosure of children's corpses.

1. What is the perinatal period?
2. What is perinatal mortality?
3. What is the rule about the autopsy of newborns who died in hospitals?
4. Which corpses of newborns should be considered premature?
5. Which fruit should be considered transferred?
6. What is the provision on the autopsy of newborns?

7. Give a comprehensive definition of "stillborn fetus".
8. Name the objective criteria for a stillborn fetus.
9. Name the objective criteria for autopsy.
10. What is a miscarriage or abortion?
11. What is sent to the surfactant in the presence of a miscarriage and what is the form of registration?
12. What are the provisions for autopsy in stillbirths up to 22 weeks and weighing less than 500g?
13. Name the criteria for issuing a medical certificate for deceased newborns. When is it issued?

The order of autopsy of children's corpses.

1. What is the provision on the autopsy of dead children in medical institutions?
2. When are the corpses of children who died in hospitals sent for forensic examination?
3. Who decides on the need for pathological examination of children's corpses?
4. In which cases are children who died outside the hospital subject to pathological autopsy?
5. Who dissects the corpses of children who died of sudden death outside the hospital:

IV. Questions of thanatology and medical death certificate.

1. What is thanatology?
2. What is the subject of study of thanatology?
3. Give a correct interpretation of the term "thanatogenesis".
4. What is the main content of thanatogenesis?
5. Why is it necessary to know the correct interpretation and understand the term "thanatogenesis"?
6. What is the mechanism of death?
7. What mechanisms of death do you know?
8. Define directly the cause of death.
9. What pathological processes can be the immediate cause of death?
10. In what diseases the mechanism of death can be the direct cause of death?
11. Types of medical death certificate.
12. Who has the right to draw up and issue a medical death certificate?
13. Who issues a medical death certificate if the death occurred at home and the accident is not required forensic examination?
14. What causes of death should be reflected in the perinatal death certificate?
15. What are the provisions for the issuance of a certificate of perinatal death in the event of death of children (fetuses) in multiple births?
16. In which cases can preliminary medical death certificates be issued?
17. When and in what terms the medical certificate is issued "instead of the previous one"?
18. What should a surfactant doctor do in case of a statement from relatives about the loss of a medical death certificate?
19. In which cases is a medical certificate of death issued by a doctor?
20. What is the legal significance of a medical death certificate?
21. Procedure for issuing a medical death certificate.

V. Diagnosis, structure and logic of clinical and pathological diagnoses.

1. What is diagnosis in medicine?
2. Define the concept of "diagnosis".
3. What types of diagnoses are distinguished in medicine depending on the purpose, nature of the examined object and the applied diagnostic methods?
4. Name the phases of the diagnostic process?
5. What nomenclature of diseases and causes of death should be used in making clinical and pathological diagnoses?
6. Name the principles of construction of pathological and clinical diagnoses.
7. Highlight the inviolable basic principles of diagnosis.
8. Give the defining characteristics of the pathological diagnosis.

9. What is the difference between the final pathological diagnosis and the clinical (lifelong) diagnosis?
 10. On the basis of what (what information) is formulated a preliminary pathological diagnosis?
 11. Can the previous pathological diagnosis change after completion of histological examination?
 12. Name the types of clinical and pathological diagnoses depending on the genesis of the disease and death.
 13. Give the concept of diagnosis of monocausal genesis of the disease.
 14. Name the structural elements of the pathological diagnosis of monocausal genesis (highlight headings).
 15. Name the general structure of the clinical diagnosis of monocausal genesis (select headings).
 16. Define the underlying disease in the clinical - anatomical concept
 17. What is the main disease in the clinical sense? In the pathological sense?
 18. What conditions can be recorded as the main diseases in the diagnosis of monocausal genesis?
 19. What is a nosological form (or unit)? Give a definition.
 20. Name the diagnostic signs of the disease (specific and nonspecific).
 21. What is a symptom?
 22. What is the syndrome?
 23. What is a symptom complex?
 24. What is the clinical picture of the disease?
 25. What is the equivalent of the nosological form?
 26. What pathological processes can be included in the concept of the equivalent of the nosological form?
 27. Name iatropathy - as the equivalent of the underlying disease associated with treatment - diagnostic measures (according to WHO ICD-10)
 28. When iatrogenic pathology takes first place in the diagnosis of the underlying disease in the presence of surgery?
 29. Is it allowed to use in the pathological diagnosis of concepts that express clinical symptom complexes?
 30. Define the complications of the underlying disease in the pathological diagnosis.
 31. Indicate the importance of complications of the underlying disease in the clinical anatomical analysis.
 32. What are comorbidities?
 33. What is the immediate cause of death?
- VI. Diagnostic errors and their analysis.**
1. Verification of clinical and pathological diagnoses.
 2. Give the defining concept of "Medical Deontology".
 3. Who is considered the founder of domestic medical deontology?
 4. What is included in the concept of the term "medical error"?
 5. What are medical errors? "
 6. Types of medical errors that occur in the work of doctors of all specialties.
 7. What medical errors occur at different stages of medical care.
 8. What causes diagnostic errors?
 9. Name the types of errors associated with treatment
 10. What caused the mistakes in carrying out preventive measures (Mainly vaccinations, vaccinations, use of biologically active substances).
 11. What causes information errors (mainly related to the principles of deontology).
 12. Name the organizational errors. Note: they are all difficult to accurately assess and account for.
 13. List the errors in keeping medical records (autopsy reports, outpatient cards of the dead, medical card of an inpatient).
 14. What are the causes of errors in the work of pathologists?
 15. Name the objective causes of errors in pathological practice

16. What are the subjective causes of errors in pathological practice?
17. What categories of assessments are established when comparing clinical and pathological anatomical diagnoses?
18. when is it considered "formal" coincidence of diagnoses of the underlying disease and its complications?
19. Name the principles of discrepancy between clinical and pathological diagnoses on the main disease.
20. What "temporary" categories of diagnosis are taken into account when comparing clinical and pathological diagnoses?
21. What does a correct, timely diagnosis mean?
22. Name the sources and objective reasons for the discrepancy of diagnoses.
23. Name the subjective causes of misdiagnosis.
24. Name the categories of differences between clinical and pathological diagnoses on the main disease

VII. Clinical and anatomical conference and medical control commission in clinical and anatomical analysis.

1. When and by whom was the first clinical - anatomical conference in the USSR?
2. The number and title of the main order of the Ministry of Health regulates the pathological service in the country.
3. Formulate the main 4. tasks of the clinical - anatomical conference.
4. List the main organizational aspects of the preparation of the clinical - anatomical conference.
5. Who is appointed by the chief physician for the clinical anatomical conference?
6. Name the general procedure for conducting a clinical anatomical conference.
7. Can the administration of the medical institution cancel the discussion of the cases proposed for consideration by the head. Surfactants at clinical and anatomical conferences?
8. Who organizes city and district clinical and pathological conferences?
9. What cases are submitted for discussion of the clinical - anatomical conference?

VIII. Clinical and anatomical analysis of biopsy and surgical material.

1. What is a biopsy?
2. Name the methods of obtaining tissue, material for in vivo histological examination.
3. List the types of biopsy depending on the method of obtaining a biopsy.
4. What is a biopsy?
5. Name the tools with which you can get material for biopsy, puncture.
6. What tools are used to obtain material for aspiration biopsy?
7. What types of biopsies are used depending on the characteristics of the method of obtaining material?

Topics for writing autopsy protocols for differentiated credit

1. Hemorrhagic stroke in a patient with hypertension.
2. Ischemic stroke in a patient with atherosclerosis of the vessels of the brain.
3. Ischemic heart disease, acute primary myocardial infarction.
4. Chronic ischemic heart disease (chronic heart aneurysm).
5. Chronic glomerulonephritis.
6. Stomach cancer.
7. Acute myeloblastic leukemia.
8. Acute lymphoblastic leukemia.
9. Lymphogranulomatosis.
10. Lobar (partial) pneumonia.
11. Lung cancer.
12. Gastric ulcer.
13. Cardiomyopathy (dilated form).
14. Cirrhosis of the liver, hepatic coma.
15. Acute pancreatitis.

"0" version of the ticket diff. offset

Petro Mohyla Black Sea National University

Level of higher education - master

Area of knowledge: 22 Health

Specialty 222 Medicine

Course - Sectional course

1. Give a schematic structure of the final clinical and pathological diagnosis of multicausal genesis. - **maximum number of points - 20.**

2. List the main histological and histochemical stains that are often used in pathological diagnosis. - **maximum number of points - 20.**

3. During the section of the deceased L. 42 years old, the pathologist found the following picture: erosive gastritis, ascites, bilateral hydrothorax, congestive renal plethora, cyanotic induration of the spleen, brown induration of the lungs, hemorrhagic infarction of the lower lobe of the right lung, muscat cirrhosis, muscat cirrhosis cardiosclerosis, hypertrophy of the walls of the right and left ventricles of the heart with dilation of their cavities, rheumatic heart disease; sclerosis of the mitral and aortic valves with their insufficiency and stenosis of the atrioventricular and aortic openings, fibrinous warty overlays on the valves. Formulate a pathological diagnosis. Write a medical certificate of death. - **maximum number of points - 20.**

4. Protection of the educational protocol of autopsy. - **maximum number of points - 20.**

Approved at the meeting of the Department of Anatomy, Clinical Anatomy, Pathomorphology and Forensic Medicine, protocol № ____ from " __ " _____ 2020.

Head of the department

doctor of medical sciences, prof. Chernov VS

Examiner

doctor of medical sciences prof. Kharchenko OV

And such 15 tickets

6. Evaluation criteria and tools for diagnosing learning outcomes

Control methods

- Survey (testing of theoretical knowledge and practical skills).
- Test control.
- Writing a review of scientific literature (abstracts).
- Preparation of presentations.

Current control. Testing in practical classes of theoretical knowledge and the acquisition of practical skills, as well as the results of independent work of students. Supervised by teachers according to the specific purpose of the curriculum. Assessment of the level of student training is carried out by: interviewing students, solving and analyzing situational tasks and test tasks, monitoring the acquisition of practical skills.

Intermediate control. Checking the possibility of using students for the practical application of theoretical knowledge and practical skills on all topics studied, as well as the results of independent work of students. Carried out in the last lesson by section by passing practical skills, testing.

Final control. In order to assess learning outcomes, the final control is carried out in the form of a differentiated test. Students who have attended all the classes provided by the curriculum, performed full independent work and in the process of learning scored the number of points, not less than the minimum - 70 points per semester are admitted to the test. The maximum number of points for the current educational activity is 120.

Distribution of points received by students

A positive assessment in each practical session can be from **7 to 12 points**. A score below 7 points means "unsatisfactory", the lesson is not credited and is subject to practice in the prescribed manner.

In a differentiated test, a student can get a maximum of **80 points**.

The test is considered passed if the student scored at **least 120 points**.

Assessment of student performance

Type of activity (task)	Maximum number of points
lesson 1	12
lesson 2	12
lesson 3	12
lesson 4	12
lesson 5	12
lesson 6	12
lesson 7	12
lesson 8	12
lesson 9	12
lesson 10	12
Together	120
Differentiated credit	80
Together	200

Criteria for assessing knowledge

Score 10.1 - 12 points for practical training and 71-80 points for diff. credit (A on the ECTS scale and 5 on the national scale) the student's answer is evaluated if it demonstrates a deep knowledge of all theoretical principles and the ability to apply theoretical material for practical analysis and has no inaccuracies.

Score 8.1-10 points in practice and 61-70 points in diff. credit (B and C on the ECTS scale and 4 on the national scale) the answer is evaluated if it shows knowledge of all theoretical provisions, the ability to apply them in practice, but some fundamental inaccuracies are allowed.

Score 7-8 points in practice and 50-60 points in diff. credit (D and E on the ECTS scale and 3 on the national scale) the student's answer is evaluated provided that he knows the main theoretical provisions and can use them in practice.

7. Recommended sources of information

7.1. Basic:

1. Blagodarov VM, Verbitsky VV, Gavrish OS, Kononchuk MA, Dibrova VA Pathology: (clinical and anatomical analysis). Tutorial. - Kyiv: SMP "Avers", 2001. - 136 p.
2. Blagodarov VM, Verbitsky VV, Kononchuk MA Course of clinical pathology. - Kyiv: SMP "Avers", 1999. - 167 p.
3. Blagodarov VM, Gavrish OS, Bogomolets KO, Verbytsky VV, Kononchuk MA Hospital pathological anatomy. - Kyiv, 2001. - 106 p.
4. Blagodarov VM, Gavrish OS, Verbytsky VV, Kononchuk MA, Rudnytska OG, Gridina TM Grammar of the diagnosis (methodical instructions - 4). - Kyiv: Phytosocial Center, 2001. - 188 p.
5. Yakovtsova AF, Kondakov IK, Nikolenko EY, Yakovtsova II, Kondakov II Final diagnosis in the light of the International Classification of Diseases, Tenth Revision (ICD-10). - Kharkiv, 2002. - 141 p.

6. Yakovtsova AF, Kondakov IK, Markovsky VD, Pitenko MM Clinical pathological anatomy. - Kharkiv: "Griffin", 2004. - 288 p.

7. 2. Additional:

1. Avtandilov GG Fundamentals of pathological practice. Manual (second edition) - M.: RMAPO, 1998. - 505 p.

2. Pospisil YO, Tomashova SA, Gavrilyuk OM Sectional course (methodical manual for 5th year students of medical faculties). - Lviv, 2009. - 50 p.

3. Zairatyants OV, Kaktursky LV, Avtandilov GG Rules for constructing a pathological diagnosis, drawing up a medical death certificate, comparing clinical and pathological diagnoses in accordance with the requirements of ICD-10 (guidelines). - M.: ИД «Нарконет», 2001. - 143 c.13.

4. International statistical classification of diseases and health problems. 10th revision (ICD-10). - Geneva: WHO, 1995. - 1,2 vol.

5. Milovanov AP Issuance of a certificate of cause of perinatal death in accordance with ICD-10. - M.: RMAPO, 1998. - 52 p.

6. Paltsev MA, Kovalenko VL, Anichkov NM Biopsy-section course guide. - M.: Медицина, 2002. - 254 c.

7. Tumansky VA, Timoshchenko SG, Kurkiv AV, Kristalyan MV Express diagnosis of HIV, hepatitis C and B infection in the blood of deceased patients // Pathology. - 2007. - vol. IV, № 3. - P.83-87.

8. Khazanov AP, Chalisov IA Sectional course guide. - M.: Медицина, 1984. - 176 c.