

Odessa National Medical University
Faculty of Medicine
Department of histology, cytology, embryology and pathological morphology
with a course in forensic medicine

Syllabus of the course
" Sectional biopsy diagnostics"

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| Scope of the academic discipline | Total number of hours per discipline: 90 hours; 3.0 credits. Semesters: IX-X . 5th year of study. |
| Days, time, place of educational discipline | According to the schedule of classes. Department of histology, cytology, embryology and pathological morphology with a course of forensic medicine . Odesa, morphological building of ONMedU, 2nd floor. Valikhovskyyi lane, 3a. Base of the department: Prosecution, university clinic, str. Tinista, 8. |
| Teacher(s) | Sytnikova V.O., MD in Medicine, Professor; Lytvynenko M.V., Ph.D., associate professor; Buryachkivskyyi E.S., Ph.D., associate professor; Oliynyk N.M., Ph.D., associate professor Narbutova T. E., Ph.D., associate professor; Artiomov O.V., Ph.D., associate professor Syvvi S.M., assistant; Savenko T.O., assistant |
| Contact Information | Help by phone: Lytvynenko Marianna Valeriivna, Head of Department +38-066-754-55-26 e - mail : mariana.lytvynenko@onmedu.edu.ua Pletnyova Angela Ivanivna, laboratory assistant of the department : 728-54-17 e-mail : gistologia@onmedu.edu.ua Face-to-face consultations: from 2:30 p.m. to 4:00 p.m. every Thursday, from 9:00 a.m. to 12:00 p.m. every Saturday Online consultations: from 2:30 p.m. to 4:00 p.m. every Thursday, from 9:00 a.m. to 12:00 p.m. every Saturday. The link to the online consultation is provided to each group during classes separately. |

COMMUNICATION

Communication with applicants will be conducted in the classroom (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber, Telegram messengers (through groups created in Viber, Telegram for each group, separately through the head of the group).

ABSTRACT OF THE ACADEMIC DISCIPLINE

Subject study of the discipline - educational discipline " Sectional biopsy diagnostics ", is the structural basis of human diseases for in-depth learning of the fundamental foundations of

medicine and the clinical picture of diseases with further use of the acquired knowledge in the practical work of a doctor, practicing communication skills.

Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):

Prerequisites : Ukrainian language (for professional direction), foreign language (for professional direction), Latin language and medical terminology, normal anatomy, clinical anatomy, histology, cytology and embryology, pathomorphology, general and clinical pathological physiology, forensic medicine, microbiology, virology and immunology, pharmacology, general pharmacy and clinical pharmacology, propaedeutics of internal diseases and therapy, pediatrics, obstetrics and gynecology, infectious diseases, family medicine, phthisiopulmonology, general surgery, internal medicine.

Postrequisites : SD Biopsy-sectional course, Pathological anatomy (internship), Pathological anatomy (Doctor of Philosophy).

Purpose of the discipline: Acquisition by the student of higher education of knowledge and formation of elements of professional competences in the field of professional and research innovative activity, and improvement of skills and competences acquired during the study of previous disciplines .

Tasks of the discipline:

1. Providing applicants with knowledge on mastering the methods of diagnosing pathological processes and diseases through the study of biopsies and postoperative material (light and electron microscopy, immunohistochemistry, autoradiography, histochemistry and cytochemistry); autopsy technician, determination of the development mechanisms of pathological conditions;

2. providing applicants with knowledge about clinical and anatomical analysis, as a method, circumstances of the occurrence of diseases, features of their course, causes and mechanisms of death, their development (morphogenesis), structural foundations of recovery, complications and consequences of diseases;

3. provision of knowledge to the acquirers regarding the definition of the structure of clinical and patho-anatomical diagnoses, the definition of the role of clinical-anatomical conferences, the medical control commission and the commission for the study of fatal consequences; regarding filling out the basic pathological-anatomical documentation.

4. providing applicants of high education with knowledge about possible iatrogenic pathology.

Expected results:

As a result of studying the academic discipline, the applicant must:

Know:

- equipment carrying out methods diagnostics pathological processes and diseases during life patients and after death (morphological methods , techniques autopsy the dead) ;
- method of conducting clinical and anatomical analysis;
- principles buildings patho-anatomical diagnosis, the role of clinical and anatomical conferences , treatment and control commissions and study commissions deadly consequences ; filling rules basic pathological and anatomical documentation ;
- options pathomorphosis diseases that arise because of various medical measures (iatrogeny) ;

The applicants of higher education be able to:

- Process material for diagnosis ;
- Install preliminary and pathoanatomical diagnosis disease ;
- To describe morphological (macroscopic , microscopic and ultrastructural) changes tissues and organs with typical pathological processes and diseases;
- evaluate the results of autopsy ;
- Fill medical documentation according to received material ;
- Fill and issue medicinal death certificate ;

- Know morphological signs pathological processes ;
- Describe received for diagnosis material ;
- Carry out microscopic diagnosis ;
- To do conclusions based on the macro- microscopic research material ;
- Conduct differential diagnosis between pathological processes .

DESCRIPTION OF THE ACADEMIC DISCIPLINE

Forms and methods of education

The discipline will be taught in the form of practical classes (30 classroom hours); organization of the applicant's independent work (60 hours).

Teaching methods: conversation, solving clinical situational problems, practicing the skills of microscopic and macroscopic diagnosis of pathological processes in organs and tissues, carrying out differential diagnosis using the main methods of pathomorphological findings , improving the skills to interpret cell pathology and substantiate the clinical and morphological characteristics of general pathological processes that determine the manifestations of diseases , improving the skills to determine the consequences of various pathological conditions.

Content of the academic discipline:

Topic 1 . Tasks, methods and organization of the pathology service, its place in the health care system of Ukraine. Basic principles of organization patho-anatomical services in medical and preventive institutions. The main one patho-anatomical documentation (orders , provisions , instructions). Mandatory forms medical documentation in patho-anatomical institution _ History development patho-anatomical services in Ukraine .

Topic 2. Method of research of biopsy, operative material and droppings. Research rules and the procedure for filing documentation regarding the study of morphological material. Participation in macroscopic study, cutting, marking of materials for intravital morphological diagnostics. Rules for taking and processing material obtained from various organs and pathological formations.

Topic 3. Analysis and evaluation of the results of the morphological study of biopsies, operative materials, droppings. The role of morphological of research in the complex examination and treatment patients _

Topic 4. Pathological anatomical autopsy deceased (adult human , newborn , stillborn or fetus). Value autopsy as reliable sources information about the causes of death of man and mortality population , about quality diagnosis and treatment in curative and preventive medicine institutions. The order of the autopsy and registration patho-anatomical documentation of it. Registration rules main patho-anatomical documentation: " Medical death certificate ", " Medical perinatal death certificates ". Procedure for drawing up the patho-anatomical protocol autopsy. Appointment and conduct procedure patho-anatomical autopsies corpses general position. Conducting procedure autopsies corpses persons who died in a hospital . Conducting procedure autopsies corpses persons who died outside the hospital. Conducting procedure autopsies corpses newborns and stillborns, children corpses. Pathological autopsy methods. Peculiarities of dissection of the corpse of a newborn , stillborn or fetus.

Topic 5. Peculiarities of autopsies of those who died from infectious diseases and especially dangerous infections.

Topic 6. Procedure autopsy bodies persons who died with suspicion of coronavirus disease (COVID-19). Requirements for the organization burial the dead from infections caused by COVID-19. Morphological changes in internal organs with Corona virus disease. Complications and causes of death in COVID -19.

Topic 7. Terminal state of the body. Definition. Mechanisms and stages of the development. Pathology of resuscitation. Concept of resuscitation pathology, stages of the development, disease of lively organism, causes and mechanisms of their development, principles of morphological diagnostics. Sudden cardiac death. Modern representations, reasons and

mechanisms development , morphological manifestations of acute cardiac failure and fibrillation ventricles . Morphological bases and equivalents arrhythmia. Pathomorphological foundations resuscitation and intensive therapy, their communication with forensic medicine assessment changes organs and tissues.

Topic 8 . Pathological anatomy polyorganic deficiencies. Foundations Thanatology. Death, mechanisms, signs. Biological, medical, social aspects because of chronic incurable disease . The concept of thanatogenesis. Structural mechanisms termination activity vitally important organs during the natural course diseases. Complication termination work heart , lungs , brain , kidneys , liver . Biological death - definition , causes and terms development in the natural course diseases. Early and late signs biological death and dying resuscitated patient. Morphological characteristics of corpses changes.

Topic 9. Principles of clinical and pathological diagnoses formulation. Drafting patho-anatomical diagnosis. Clinical and morphological analysis materials held patho-anatomical autopsy in aspect evaluations quality everyday life diagnostics and treatment (pathological examination). Comparison clinical and pathological diagnoses. Categories disagreements diagnoses. Writing patho-anatomical epicrisis. International classification of diseases (ICD) is a regulatory document that provides unity methodical approaches and international verification materials. ICX of the 10th and 11th revisions. Work with International classification of diseases X revision (1995) according to patho-anatomical diagnosis autopsy.

Topic 10. Features of duration, variability of diseases. Pathomorphosis diseases (natural and induced). Pathology diagnostic and treatment procedures (iatrogeny).

Topic 11. Preparation and holding of the meeting of the medical and control commission, the commission for the study of fatal consequences and the clinical and anatomical conference. Deontological and ethical aspects in pathology practice. Procedure for review of medical card.

Topic 12. Control of practical skills and theoretical knowledge. Credit class.

List recommended literature :

a) main :

1. Atlas of micropreparations in pathomorphology / I.I. Starchenko, B.M. Filenko , N.V. Royko and others; VDZU "UMSA". - Poltava, 2018. - 190 p
2. Neoplasms of the maxillofacial region in children / P.I. Tkachenko, I.I. Starchenko, S.O. Belokon and others. – Poltava: Col. "ASMI" - 2018. - 190 p.
3. The basics of pathology according to Robbins: in 2 volumes. Volume 1 / Vinay Kumar, Abul K. Abbas, John C. Aster ; translation of the 10th Eng . edition. Publisher: All-Ukrainian specialized publishing house "Medytsyna". – X II . - 2019. - 420 p.
4. The basics of pathology according to Robbins: in 2 volumes. Volume 1 / Vinay Kumar, Abul K. Abbas, John C. Aster ; translation of the 10th Eng . edition. Publisher: All-Ukrainian specialized publishing house "Medytsyna". – X II . - 2019. - 420 p.
5. Pathomorphology . General pathomorphology : a study guide / edited by Ya. Ya. Bodnara, V.D. Voloshina, A.M. Romanyuk, V.V. Gargin . - New Book, 2020. - 248 p.
6. Pathomorphology basic infatuations cardiovascular systems : educational manual / I.I. Starchenko , B.M. Filenko , N.V. Royko _ – Poltava : "UMSA". - 2019. - 150 p.
7. Workshop on biopsy and dissection course / I.I. Starchenko, A.P. Hasiuk , S.A. Proskurnya [etc.] – Poltava, 2016. – 160 p.
8. I.I. Starchenko Pathomorphology of the main diseases of the maxillofacial region: academician . help _ / I.I. Starchenko, B.M. Filenko , V.V. Chernyak ; "UMSA". – Vinnytsia: Nova Kniga, 2019. – 128 p.
9. C tarchenko I.I. Special pathomorphology (basic course) for students of medical faculties of higher medical educational institutions III-I V levels of accreditation / I. I. _ Starchenko, N.V. Royko , B.M. Filenko . – Poltava, 2017. – 174 p.

10. Tuffaha S. A. Muin Immunohistochemistry in diagnostics tumors / S. A. Tuffaha Muyn , S. G. Hychka, Hans Gusky. – "Book Plus", 2018. – 336.

b) additional :

1. Sorokina IV Biopsy-autopsy course (clinical pathology) / I.V.Sorokina , VD Markovskiy . - Kharkiv, 2012. - 60 c.
2. Benign neoplasms of bones of the maxillofacial area in children / P.I. Tkachenko, I.I. Starenko , S.O. Bilokin [and others] - P.: "UMSA", 2016. - 85 p
3. General pathomorphology / I.I. Starchenko, N.V. Royko , B.M. Filenko [and etc.] – Poltava , 2016. – 136 p.
4. Zerbino D. D. Pathomorphology and histology: atlas / D. D. Zerbino , M. M. Bagrii, Y. Ya. Bodnar, V. A. Dibrova. – Vinnytsia: Nova Kniga, 2016. – 800 p.
5. Methods of morphological research / M.M. Baghrii, V.A. Dibrova, O.G. Papadynets , M.I. Grischuk; edited by M.M. Baghria, V.A. Dibrovoy – Vinnytsia: Nova Kniga, 2016. – 328 p.
6. Novoseltseva T.V. Pathology of sexual and endocrine systems / T.V. Novoseltseva , B.M. Filenko , N.I. Hasiuk _ – Poltava: ASMI LLC , 2015. – 199 with.
7. Pathomorphology : Nat . at hand / V.D. Markovskiy , V.O. Tumansky I.V. Sorokina et al., edited by V.D. Markovskiy , V.O. Tumansky . — K.: VSV "Medicine". 2015— 936 p., color _ kind. ISBN 978-617-505-450-5

ASSESSMENT

Forms and methods of current control: oral survey, testing, assessment of performance of practical skills, solution of situational pathomorphological tasks, assessment of activity in class. Means of diagnosing the level of students' training: solving test tasks from the database of the KROC license exam; procedurally structured control of practical skills and abilities (assessment of knowledge and ability to analyze and interpret macro- and microscopic changes in cells, tissues, organs and systems during certain pathological processes); interview.

Current evaluation criteria in practical training

Current assessment criteria for practical training:

| Rating | Evaluation criteria |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| "5" | The applicant knows the program in its entirety , illustrating the answers with various - examples; gives exhaustively accurate and clear answers without any leading questions; teaches the material without errors and inaccuracies ; performs practical tasks of varying degrees of complexity (solves situational clinical problems, tests, knows how to diagnose pathological processes in organs and tissues according to the algorithm). |
| "4" | The student knows the entire program and understands it well, answers the questions correctly, consistently and systematically, but they are not exhaustive , although the student answers additional questions without mistakes; performs practical tasks, experiencing difficulties only in the most difficult cases (orients himself within the limits of the above-mentioned questions and knows how to diagnose pathological processes in organs and tissues according to the algorithm); |
| "3" | It is given to the applicant on the basis of his knowledge of the entire scope of the program on the subject and a satisfactory level of understanding of it. The acquirer is able to solve simplified problems with the help of leading questions; performs practical skills, experiencing difficulties in simple cases; he is not able to systematically answer on his own, but he answers correctly to directly asked questions (he has a superficial idea of pathological conditions and does not know how to |

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| | diagnose pathological processes in organs and tissues according to an algorithm). |
| "2" | The acquirer does not have the material, does not know any of the above questions, or knows less than 50% of the questions and does not know how to diagnose pathological processes in organs and tissues according to the algorithm. |

Forms and methods of final control: credit, issued to the applicant who completed all sections of the educational program of the selected discipline, took an active part in seminars, has an average current grade of at least 3.0 and has no academic debt.

Possibility and conditions of obtaining additional (bonus) points: not provided.

INDEPENDENT WORK OF STUDENTS OF HIGHER EDUCATION

Independent work involves preparation for each practical lesson.

POLICY OF EDUCATIONAL DISCIPLINE

Deadlines and Rescheduling Policy :

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

Academic Integrity Policy :

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable in educational activities for participants of the educational process are:

- the use of family or official ties to obtain a positive or higher grade during any form of control of academic performance or academic merit;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

For violation academic integrity acquirers education can be attracted to such academic responsibility :

- decrease results assessment practical skills, assessment in class, credit etc.;
- repeated passage assessment (practical skills , assessment etc.);
- appointment additional control measures (additional individual tasks, practical skills, tests, etc.);
- carrying out additional checks others works authored by the infringer.

Attendance and Tardiness Policy:

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen.

State of health: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for a class can attend it, but if the teacher put " ab " in the journal, he must complete it in the general order.

Using mobile devices :

Mobile devices may be applied acquirers with permission teacher , if they are needed for implementation tasks.

Behavior in the audience :

Behavior applicants and teachers in classrooms must be working and calm, strictly answer rules, installed [Provisions of the academic integrity and ethics academic relations in Odesa national medical university](#), in accordance with the [Academic Code ethics and relationships university community of Odesa national medical of the University](#), [Provisions of the city on prevention and detection academic plagiarism in research and education work acquirers higher of education, scientists and teachers of Odesa national medical university](#)

The syllabus was compiled by: Associate Professor M.V. Litvinenko,

Associate Professor T.E. Narbutova.