

Odesa National Medical University
Department of Normal and Pathological Clinical
Anatomy

Syllabus course
"BIOPSY SECTION COURSE"

Amount	4 credits / 120 hours
Semester, year teaching	IV semester, 2 course
Days, time, place	According to the schedule in the classroom of the department of normal and pathological clinical anatomy, Valikhovskyi Lane, 3. Base of the department: Prosecture, University clinic, str. Tinista, 8.
Teacher (es)	1. Lytvynenko Marianna Valeriyvna, PhD, associate professor, doctor of the highest category; +38-066-754-55-26; prozektor777@gmail.com 2. Sytnikova Varvara Oleksandrivna, MD, professor, doctor of the highest category; +38-067-450-41-10; patanonmedu@ukr.net 3. Olyinyk Nina Mykolayivna, PhD, associate professor, doctor of the highest category; ; +38-067-994-37-04; ninao-leynik46@gmail.com 4. Narbutova Tamara Yevgenivna, PhD, assistant + 38-096-998-02-38; t.narbutova@ukr.net
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working place	Office professor of the department of normal and pathological clinical anatomy. Valikhovskyi Lane, bldg. 3., 2nd floor Base of the department: Prosecture, University clinic, str. Tinista, 8.
Consultations	<i>Face-to-face consultations</i> : Thursday - from 3:00 p.m. to 5:00 p.m.; Saturday - from 9:00 a.m. to 1.00 p.m., <i>Online consultations</i> : Thursday - with 3.00 to 5.00; Saturday - with 9.00 a.m. to 1.00 p.m. <i>Microsoft Teams</i> or by <i>Telegram/Viber/ Zoom/WhatsApp</i>

COMMUNICATION

Communication with graduate students is carried out by eye meetings. In case transition on remote teaching communication with graduate students will be to be carried out by help E-mail of the department: anatomy@onmedu.edu.ua, as well as using messenger programs: Microsoft Teams, Moodle, Telegram, Viber and Zoom.

ANNOTATION COURSE

Subject study disciplines

The subject of study of the educational discipline " Biopsy-section course" there are a structural foundation 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.

Prerequisites and post-requisites course (Place disciplines in educational program)

Study educational disciplines "Biopsy-section course" is based on the study by the acquirers of the previous ones (providers) disciplines, namely: "Normal anatomy", "Clinical anatomy", "Pathological anatomy", "Histology, cytology and embryology", "General and clinical pathological physiology", "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", which involves integration with these disciplines and forming the ability to apply knowledge in the process of further education and professional activity.

Goal course

The purpose of the selective educational discipline "Biopsy-section course" is to improve the quality of training of specialists who are able to competently solve complex problems in the field of professional and research innovation activities when planning and performing their own research and training doctors of philosophy for the high-quality performance of functional duties, related to the diagnosis of pathological processes, with the use of modern methods of immunohistochemical diagnostics, which will allow to choose adequate methods of treatment and reduce the frequency or prevent the occurrence of unwanted complications during treatment, will improve the quality of life.

Task disciplines:

- imparting knowledge to the candidates of the degree of Doctor of Philosophy regarding various methods of diagnosis of pathological processes and diseases through the study of biopsies and postoperative material (world and electron microscopy, immunohistochemistry, autoradiography, histochemistry and cytochemistry); autopsy technician, determination of the mechanisms of development of pathological conditions;
- providing the holders of the degree of Doctor of Philosophy with knowledge regarding the study of the importance of clinical and anatomical analysis as a method of knowledge of the 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;
- provision of knowledge to those obtaining the degree of Doctor of Philosophy regarding the definition of the structure of clinical and patho-anatomical diagnoses, the definition of the role of clinical-anatomical conferences, the treatment and control commission and the commission for the study of fatal consequences; regarding filling out the basic pathological-anatomical documentation;
- provision of knowledge about possible iatrogenic pathology to those obtaining the degree of Doctor of Philosophy.

Learning outcomes for the discipline.

*A graduate student (applicant) should **know**:*

- the technique of conducting methods of diagnosing pathological processes and diseases during the life of patients and after death (morphological methods, techniques of autopsy of the dead);
- clinical and anatomical analysis methodology;
- principles of constructing a patho-anatomical diagnosis, the role of clinical-anatomical conferences, the medical control commission and the commission for the study of fatal consequences; rules for filling out basic pathological and anatomical documentation;
- variants of the pathomorphosis of diseases arising as a result of various medical measures (iatrogeny);

*A graduate student (applicant) **must be able to**:*

- process material for diagnostics;
- establish a preliminary and pathological-anatomical diagnosis of the disease;
- describe morphological (macroscopic, microscopic and ultra-structural) changes in tissues and organs in typical pathological processes and diseases;
- evaluate the results of the autopsy;
- fill out medical documentation according to the received material;
- fill out and issue a medical death certificate;
- to know morphological signs of pathological processes;
- describe the material obtained for diagnosis;
- perform microscopic diagnostics;
- draw conclusions based on macro-microscopic examination of the material;
- carry out differential diagnosis between pathological processes.

DESCRIPTION COURSE

Forms and methods teaching

The course is taught in the form of seminar classes (60 h.) and by organization independent works graduate students (60 hours); all together – 120 hours (4 credits).

The study of the discipline is implemented on the basis of the following methods:

- according to the dominant means of education: verbal, visual;
- solving clinical (situational) tasks;
- blitz survey;
- group discussions on problem situations;
- performance of written tasks;
- individual control interview

- the "brainstorming" learning method, which encourages students to show a creative approach and find alternative methods of solving the proposed tasks through free expression of thoughts

Content educational disciplines

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

documentation in a patho-anatomical institution. The history of the development of the pathology service in Ukraine.

Topic 2. Rules for issuing basic pathological documentation: "Medical death certificate", "Medical certificate of perinatal death". The procedure for drawing up the protocol of the pathological autopsy of a corpse.

Topic 3. 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 the macroscopic study, cutting, marking of materials for intravital morphological diagnostics.

Topic 4. Pathological autopsy of the deceased (adult, newborn, stillborn or fetus). The importance of autopsy as a reliable source of information about the causes of human death and population mortality, about the quality of diagnosis and treatment in medical and preventive institutions. The procedure for conducting an autopsy and the preparation of patho-anatomical documentation regarding it.

Topic 5. Peculiarities of autopsies of those who died from infectious diseases and especially dangerous infections. The procedure for performing autopsies on the bodies of persons who died with suspicion of the coronavirus disease (COVID-19). Requirements for organizing the burial of those who died from infections caused by COVID-19.

Topic 6. Terminal states of the body. Definition. Mechanisms and stages of development. Resuscitation pathology. The concept of intensive care pathology, stages of development, diseases of the living organism, causes and mechanisms of their development, principles of morphological diagnosis. Sudden cardiac death. Modern concepts, causes and mechanisms of development, morphological manifestations of acute heart failure and ventricular fibrillation. Morphological bases and equivalents of arrhythmias. Pathological anatomy of multiple organ failure. Fundamentals of Thanatology. Death, mechanisms, signs. Biological, medical, social aspects due to a chronic incurable disease. The concept of thanatogenesis. Structural mechanisms of cessation of activity of vital organs during the natural course of the disease. Complications of stopping the work of the heart, lungs, brain, kidneys, and liver.

Topic 7. Principles of formulating clinical and patho-anatomical diagnoses. Making a patho-anatomical diagnosis. Clinical and morphological analysis of the materials of the post-mortem examination of the corpse in the aspect of assessing the quality of end-of-life diagnosis and treatment (mortem examination). Comparison of clinical and pathological diagnoses. Categories of diagnosis discrepancies. Writing a patho-anatomical epicrisis.

Topic 8. Features of the course, variability of diseases. Pathomorphosis of diseases (natural and induced). Pathology of diagnostic and treatment procedures (iatrogeny).

Topic 9. 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 patho-anatomical practice. Control of practical skills and theoretical knowledge. Credit class. Final control of mastering the discipline.

List recommended liter

Main (basic):

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 area in children / P.I. Tkachenko, I.I. Starchenko, S.O. Belokon and others. – Poltava: Col. "ASMI" - 2018. - 190 p.
3. Fundamentals of pathology according to Robbins: in 2 volumes. Volume 1 / Vinay Kumar, Abul K. Abbas, John C. Astaire; translation of the 10th Eng. edition. Publisher: All-Ukrainian specialized publishing house "Medytsyna". – X II. - 2019. - 420 p.
4. Fundamentals of pathology according to Robbins: in 2 volumes. Volume 1 / Vinay Kumar, Abul K. Abbas, John C. Astaire; 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 of the main disorders of the cardiovascular system: study guide / I.I. Starchenko, B.M. Filenko, N.V. Royko – Poltava: "UMSA". - 2019. - 150 p.
7. Workshop on biopsy-sectioning course / I.I. Starchenko, A.P. Hasyuk, S.A. Proskurnya [etc.] – Poltava, 2016. – 160 p.
8. I.I. Starchenko Pathomorphology of the main diseases of the maxillofacial region: academician. manual / I.I. Starchenko, B.M. Filenko, V.V. Chernyak ; "UMSA". – Vinnytsia: Nova Kniga, 2019. – 128 p.
9. Starchenko I.I. Special pathomorphology (basic course) for students of medical faculties of higher medical educational institutions of III-IV levels of accreditation / I.I. Starchenko, N.V. Royko, B.M. Filenko. – Poltava, 2017. – 174 p.
10. Tuffaha S. A. Muin Immunohistochemistry in tumor diagnostics / S. A. Tuffaha Muin, S. G. Hychka, Husky Hans. – "Book Plus", 2018. – 336.

Additional

1. Sorokina I.V. Biopsy-autopsy course (clinical pathology) / I.V. Sorokina, V.D. Markovskiy. - Kharkiv, 2012. - 60 c.
2. Benign tumors of the bones of the maxillofacial area in children / P.I. Tkachenko, I.I. Starchenko, S.O. Bilokin [and others] - P.: "UMSA", 2016. - 85 p
3. General pathomorphology / I.I. Starchenko, N.V. Royko, B.M. Filenko [et al.] – 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. Dibrovyy – 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: LLC "ASMI", 2015. - 199 p.
7. Pathomorphology: national. handyman / V.D. Markovskiy, V.O. Tumanskyi I.V. Sorokina et al., edited by V.D. Markovskiy, V.O. Tumanskyi. — K.: VSV "Medicine". 2015— 936 p., color. view. ISBN 978-617-505-450-5

EVALUATION

Current control is carried out at seminar classes in accordance with formulated tasks for each topic. When evaluating educational activities, preference is given to

standardized control methods: oral survey, computer tests; solving (clinical) situational problems; structured written work. When mastering each topic for the current educational activity, the student is given grades on a 4-point traditional scale. The current academic performance is calculated as the average current score, i.e. the arithmetic average of all grades received by the graduate student (student) on a traditional scale, rounded to 2 (two) decimal places, for example 4.75.

Assessment current control with disciplines:

The meaning of the "**excellent**" grade: the graduate student shows special creative abilities, can independently acquire knowledge, without help teacher finds and processes the necessary information, knows how to use the acquired knowledge and skills for solution tasks capable to produce innovative methods solution problems convincingly argues answers independently reveals own gifting and inclines.

Value evaluations "**good**": postgraduate free owns learned volume material, applies him on practice, free solves exercises and tasks in in standard situations, independently corrects the mistakes made, the number of which insignificant.

Value evaluations "**satisfactory**": postgraduate capable master significant part of the theoretical material, but mainly in a reproductive form, demonstrates knowledge and understanding of the main provisions, with the help of the teacher can analyze educational material, correct mistakes, among whose is significant the number of significant.

Value evaluations "**unsatisfactory**": postgraduate owns material on levels individual fragments that constitute insignificant part educational material.

Forms and methods final control

The study of the academic discipline ends with a test. Only those graduate students who have no academic debt and have an average score for the current educational activity of at least 3.00 are admitted to the final certification.

The obtained average score for the discipline is converted into a grade on a 200-point scale by multiplying the arithmetic average by 40. The discipline is credited to a graduate student if he has scored at least 120 points.

Scale for assessing the level of mastery of the discipline

Assessment on a 200-point scale	Evaluation on a national scale	
185,0 - 200	Excellent	5
151,0 - 184	Good	4
120,0 – 150	Satisfactory	3
<120,0	Unsatisfactory	2

Independent work

Assessment independent works graduate students and acquirers, which provided in topics near with auditorium work is carried out under time current control of the topic in the corresponding classroom session.

POLICY COURSE ("rules games")

Policy of deadlines and rearrangement

Task necessary perform in time according to the deadline By untimely implementation task postgraduate receives unsatisfactory assessment If getter of higher

education was absent from classes for any reason, then practice is carried out within the deadlines set by the teacher in accordance with the "Regulations on organization of the educational process at ONMedU" (link to the regulations on the website of the University <https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-process.pdf>). Rearranging is carried out in accordance to approved graphics

Policy of academic integrity

The policy of the educational component is based on the principles of the academic one integrity (link to the regulations on the university 's website <https://onmedu.edu.ua/wp-content/uploads/2020/07/polozhennja-pro-dobrochesnist.pdf>) and is defined system requirements, which teacher presents to of the acquirer at studies educational component:

- ♦ independent implementation educational tasks, tasks current and final control of learning results (for persons with special educational needs this one requirement is applied with taking into account their individual needs and opportunities);
- ♦ references to sources of information in the case of using ideas, developments, statements information

Policy of visiting and delays

To get a satisfactory assessment is mandatory and work in classroom classes (seminar classes). The lateness of the graduate student is allowed not more than by 10 minutes

Mobile devices

The use of mobile devices is allowed in class with permission teacher

Behavior in audience

Under time finding in audience have to cultivate such values: respect for colleagues; tolerance for others; receptivity and impartiality; argumentation of agreement or disagreement with the opinion of other participants in the discussion, as well as own thoughts; worship dignity personality opponent/s under time communication; compliance ethics academic relationship

The syllabus was compiled by
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