



## INTERNATIONAL SCHOOL OF MEDICINE

### SYLLABUS

<b>Program:</b>	General medicine
<b>Qualification of the graduate:</b>	General practitioner / Medical doctor
<b>Year:</b>	2022-2023
<b>Semester:</b>	3
<b>Course duration:</b>	18 weeks
<b>Instructor/Assistant/Professor</b>	Name: instructors Abykeeva Dinara, Alisherova Ayzat
<b>Department:</b>	Pathology
<b>Day and Time for consultation:</b>	-
<b>Classroom:</b>	110
<b>e-mail:</b>	dinarabykeeva@gmail.com
<b>Course Title:</b>	Pathological anatomy
<b>Must/Elective:</b>	
<b>Credit/Hours:</b>	4
<b>Course Description:</b>	Pathological anatomy is one of the main fundamental medical disciplines. For a long time it used the knowledge gained during autopsy, but modern pathology is more focused on the needs of clinical practice: methods of pathological anatomy, especially histological examination, are used for intravital diagnosis of various pathological processes. Morphological diagnosis is of great importance in the choice of treatment tactics, determining the prognosis of the disease, especially in oncology.
<b>Course Objectives:</b>	The purpose of the discipline is to study the etiology, pathogenesis, structural bases of pathological processes, acquired, congenital and hereditary diseases, their complications, outcomes, causes of death to use the acquired knowledge in the clinical departments and work of the doctor.
<b>Prerequisites:</b>	Normal anatomy, biology and medical genetics, histology, microbiology.
<b>Post-requisites:</b>	Clinical pathological anatomy, internal medicine, general surgery, and other clinical disciplines.
<b>Learning Outcomes: (expected knowledge &amp; ability at the end)</b>	Will know the terms used in the course of pathological anatomy and the basic methods of pathological anatomical study; concepts of etiology, pathogenesis, morphogenesis, pathomorphosis of disease, nosology, principles of disease classification; Will understand the essence and basic laws of general pathological processes; characteristic changes of internal organs in the most important human diseases;

	<p>Will be able to use the rules of pathological and anatomical diagnosis, principles of clinical and anatomical analysis of biopsy and surgical material; use the acquired knowledge of structural changes in pathological processes and diseases in the study of subsequent clinical disciplines;</p> <p>Will be able to determine macroscopic changes in organs and tissues in general pathological processes and various diseases (diagnosis of macro preparations); participate in the examination of the corpse at autopsy and determine the signs of death and postmortem changes; justify the nature of the pathological process and its clinical manifestations; diagnose the causes, pathogenesis and morphogenesis of diseases, their manifestations, complications and outcomes, as well as pathomorphosis;</p> <p>Will be able to perform clinical and anatomical analysis; comparison of morphological and clinical manifestations of diseases; macroscopic diagnosis of pathological processes; microscopic (histological) diagnosis of pathological processes;</p> <p>Will be able to analyze macroscopic morphological characteristics of organs and tissues in order to establish a preliminary pathological diagnosis; clinical, laboratory, experimental, and other data and formulate on their basis a conclusion about the most likely causes and mechanisms of pathological processes (diseases);</p> <p>Will be able to synthesize the results of clinical and anatomical analysis;</p> <p>Will be able to evaluate and develop principles of etiotropic and pathogenetic therapy.</p>
<b>Basic references:</b>	<ol style="list-style-type: none"> <li>1. Robbins Basic Pathology (Robbins Pathology) 10th edition</li> <li>2. Robbins. General pathology 10th edition</li> </ol>
<b>Supplementary Textbook and Materials:</b>	<ol style="list-style-type: none"> <li>3. Robbins and Cotran Pathologic basis of disease 10th edition</li> <li>4. Kumar Cotran Robbins. General pathology 5th edition</li> </ol> <p>Websites:</p> <ol style="list-style-type: none"> <li>1. nature.com - Pathology</li> <li>2. feedspot.com</li> <li>3. webpath.med.utah.edu</li> </ol>

### **COURSE POLICY AND EVALUATION CRITERIA:**

<b>Type of control (current, milestone, final)</b>	<b>Control form</b>	<b>Assessment of learning outcomes</b>
Attendance	For one missed lesson minus 2 points	20 points
Current control	Oral survey, written work	20 points
IWS+IWW	Performing assignments, work with literature	20 points
Milestone control (modul submission)	Testing, control tasks	40 points
Final control (differential test)	Conversation, examination (test.edu.kg)	100 points

Scale of correspondence between grades and scores on the final control (exam)	
Score	Grade
90-100	«excellent»
76-89	«good»
60-75	«satisfactory»
0-59	«unsatisfactory»

Course Plan	Lecture / Practice	Subject
1 week	practice	Introduction to Pathological Anatomy
2 week	practice	Cell injury. Necrosis. Types. Apoptosis
3 week	practice	Intracellular accumulations
4 week	practice	Extracellular accumulations
5 week	practice	Pigmentations. Calcification
6 week	practice	Circulatory disorders. Edema. Hyperemia, arterial (active) and venous (passive). Ischemia
7 week	practice	Circulatory disorders. Thrombosis, embolism, infarction. Shock
8 week	practice	Inflammation. General pathology. Acute inflammation
9 week	practice	Chronic inflammation. Granulomatous inflammation
<b>Modul 1</b> <b>(25.10.22-</b> <b>29.10.22)</b>		
10 week	practice	Cellular Adaptations
11 week	practice	Tissue repair. Regeneration. Wound healing
12 week	practice	Neoplasia. General pathology
13 week	practice	Epithelial tumors
14 week	practice	Mesenchymal tumors. Melanin-derived tumors. Tumors in children
15 week	practice	Genetic disorders
16 week	practice	Congenital disorders
17 week	practice	Immunopathology
<b>Modul 2</b> <b>(20.12.22-</b> <b>23.12.22)</b>		
18 week	practice	Environmental disorders