



Department of Human Physiology and Pathophysiology

PATHOPHYSIOLOGY

SEMINARS (27 h):

No.	Semianr	Tutor	Hours
1	Pathophysiology of muscle diseases. 1. Muscular dystrophies. 2. Channelopathies. 3. Myopathies resulting from genetically determined defects in muscle cell metabolism. 4. Inflammatory myopathies. 5. Toxic and drug-induced myopathies.	B. Kordas, DVM	2
2	Pathophysiology of nervous system diseases. 1. Sensory disturbances 2. Flaccid versus spastic paresis 3. Speech disorders 4. Basal ganglia damage — pathophysiology of Parkinson's disease and Huntington's disease 5. Pathophysiology of dementias 6. Pathophysiology of epilepsy 7. Pathophysiology of stroke 8. Attention Deficit Hyperactivity Disorder (ADHD)	B. Kordas, DVM	2
4	Pathophysiology of hematopoietic system diseases. 1. Diseases of the red blood cells. 2 Diseases of the white blood cells.	B. Kordas, DVM	2 h





	3. Hemostasis disorders.		
COURSE TEST 1 (K1) – 70 min – sem. 1-3, literature: JLB – Chapter 9, 10, 11, 13, 14, 44, 45, 46, 51 p. 1058-1061			
4	Pathophysiology of the cardiovascular system. 1. Arterial hypertension. 2. Pulmonary hypertension. 3. Venous Thromboembolism. 4. The formation of murmurs.	B. Kordas, DVM	2h
5	Pathophysiology of the cardiovascular system - ECG. 1. Pathophysiology changes in the ECG recording.	J. Ruść, MD	2h
6	Pathophysiology of the respiratory system. 1. Pathophysiology of the obstructive diseases in the respiratory system. 2. Pathophysiology of the restrictive diseases in the respiratory system. 3. Pathophysiology of interstitial diseases. 4. Respiratory failure.	B. Kordas, DVM	2 h
COURSE TEST 2 (K2) – 70 min – sem. 4-6, literature: JLB – Chapter 15, 16, 18, 19, 21, 22, 23, LSL – Chapter 4			
7	Pathophysiology of the digestive system - digestive tract and pancreas. 1. Acute liver failure. 2. Fatty liver. 3. Cirrhosis of the liver. 4. Cholestasis. Jaundice. 5. Viral hepatitis. 6. Autoimmune diseases of the liver.	B. Kordas, DVM	2 h
8	Pathophysiology of the digestive system - liver.	B. Kordas, DVM	2 h





	1. Diarrhea. 2. Celiac disease. 3. Inflammatory bowel diseases. 4. Malnutritional disorders. 5. Chronic pancreatitis.		
9	Pathophysiology of renal and bladder function. 1. Urinary tract infections, urinary system disorders. 2. Tumors and kidney cysts. 3. Chronic kidney disease. 4. Urolithiasis.	N. Kwella, MD, PhD	2h
10	Pathophysiology of the endocrine system. 1. Pathophysiology of the reproductive system. 2. Types of diabetes. 3. Nutrition and nutritional disorders - psychosomatic nutritional disorders, malnutrition and cachexia. 4. Vitamins.	B. Kordas, DVM	2 h
11	Pathophysiology of bone diseases. Cytokine storm. Macrophage Activation Syndrome. 1. Pro-inflammatory and anti-inflammatory cytokines. 2. Cytokine receptors. 3. Cytokine storm in the course of macrophage activation syndrome. 4. Bone metabolism. 5. Role and significance of vitamin D. 6. Osteoporosis. 7. Osteomalacia.	B. Kordas, DVM	2 h





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8. Paget's disease of bone.		
COURSE TEST 3 (K3) – 70 min – sem. 7-11, literature: <u>JLB – Chapter 27, 28, 29, 31, 33, 36, 37, 38, 40, 41, 4251 p. 1045-1057</u>		

JLB – J. L. Banasik, "Pathophysiology", Elsevier, 2022, 7th edition

LSL – L. S. Lilly, „Pathophysiology of Heart Disease: An Introduction to Cardiovascular Medicine. Seventh edition.”, Wolters Kluwer, 2020, 7th edition

Olsztyn, 30.09.2026

Łukasz Jaśkiewicz, MD, PhD

Coordinator of Pathophysiology Course



WYDZIAŁ LEKARSKI, COLLEGIUM MEDICUM / KATEDRA FIZJOLOGII I PATOFIZJOLOGII CZŁOWIEKA
UNIWERSYTET WARMIŃSKO-MAZURSKI W OLSZTYNIE
ul. Warszawska 30, 10-082 Olsztyn
tel. (89) 524 53 04
fax (89) 524 53 07