



Department of Human Physiology and Pathophysiology
PATHOPHYSIOLOGY

LECTURES (28 h):

No.	DATE	Topic	Lecturer	Hours
1	01.10.2025 13:00-14:30 (CSM, 100D)	General Pathophysiology Part 1 1. Pathophysiology 2. Health versus disease 3. Effects of environmental factors	J. Kiewisz, M.Sc, PhD, DSc, prof. UWM	2 h
	09.10.2025 13:30-15:00 (CSM, 100D)	General Pathophysiology Part 2 1. Cell pathophysiology 2. Inflammation 3. Pathophysiology of edema 4. Disorders of thermoregulation 5. Pathophysiology of burns	J. Kiewisz, M.Sc, PhD, DSc, prof. UWM	
2	16.10.2025 15:30-17:00 (CSM, 100D)	Autoimmunity and autoimmune diseases. 1. Mechanisms preventing autoimmunity 2. Mechanisms of autoimmunity 3. Genetic factors predisposing to the development of autoimmunity. 4. Immunopathogenetic mechanisms in autoimmune diseases. 5. Autoimmune diseases - specific and systemic.	A. Skowrońska, DVM, PhD, DSc, prof. UWM	2 h





3	24.10.2025 18:00-19:30 (TEAMS - online)	Pathophysiology of neoplastic diseases. 1. What is neoplastic disease: changing at the levels: genomic, epigenetic. Dysregulation by growth factor receptors, immun system surveillance disorders. 2. Factors promoting carcinogenesis in humans. 3. Principles of anticancer therapies, clinical trials, the importance of molecularly targeted drugs.	prof. S. Nawrocki, MD, PhD	2 h
4	28.10.2025 17:45-19:15 (CSM, 100D)	Pathophysiology of the shock. 1. Types of shock: cardiogenic, hypovolemic / haemorrhagic, distributional. Mixed form. Sepsis and septic shock. Adrenal crisis. 2. Microcirculation disorders in shock. Mechanisms of adaptation and compensation. 3. Phases of shock: reversible, irreversible decompensated. 4. Immune system, coagulation cascade, inflammation, oxidative stress and ischemia-reperfusion stress in shock. 5. Consequences in organs and selected clinical signs in various forms and stages of shock.	prof. T. Stompór, MD, PhD	2 h
5	07.11.2025 13:30-15:00 (CSM, 100D)	Pathophysiology of Cardiovascular System Diseases, Part 1 1. Pathophysiology of atherosclerosis 2. Lipid disorders 3. Ischemic heart disease	Ł. Jaśkiewicz, MD, PhD	2 h
7	14.11.2025 15:00-16:30 (CSM Lecture Hall)	Pathophysiology of Cardiovascular System Diseases, Part 2 1. Heart failure 2. Cardiomyopathies 3. Valvular heart diseases	Ł. Jaśkiewicz, MD, PhD	2 h





8	20.11.2025 09:00-10:30 (TEAMS - online)	Pathophysiology of respiratory system diseases. 1. Anatomy of the respiratory system. 2. Pathophysiology of respiration mechanics. 3. Lung volumes and capacities. 4. Disorders of gas diffusion. 5. Research in functional respiratory system.	prof. A. Doboszyńska, MD, PhD	2 h
9	26.11.2025 17:00-18:30 (TEAMS - online)	Pathophysiology of gastrointestinal tract diseases. 1. Swallowing disorders. 2. Esophageal diverticula. 3. Helicobacter pylori infection. 4. Tumors of the stomach. 5. Gallstones. 6. Acute inflammation of the pancreas. 7. Inflammatory bowel diseases and colon cancer.	N. Dowgiałło-Gornowicz, MD, PhD, prof. UWM	2 h
10	02.12.2025 12:30-14:00 (WSS, room 3)	Pathophysiology of renal diseases. 1. Pathogenesis i mechanisms of proteinuria development. Proteinuria of glomerular origin. 2. Immunopathogenesis glomerular kidney disease. 3. Genetically determined diseases of the glomeruli. Gene mutations coding proteins for podocyte and basement membrane collagen as the cause of proteinuria. Goodpasture's disease and Alport syndrome as examples of diseases related to collagen abnormalities of the basal membrane. 4. Role autoantibodies in the development of kidney damage.	prof. T. Stompór, MD, PhD	2 h





		5. Pathogenesis of diseases of the tubulo-interstitial compartment. 6. Pathogenesis of acute kidney damage. 7. Hormones of renal origin and hormonal consequences kidney disease.		
11	09.12.2025 10:00-11:30 (WSS, room 3)	Diseases of the endocrine system. 1. The hypothalamic-pituitary-secret organ axis internal. 2. Pituitary gland deficiency and excess hormones. 3. Disorders of the thyroid gland, parathyroid glands, adrenal glands, gonads and endocrine pancreas.	W. Matuszewski, MD, PhD	2 h
12	17.12.2025 10:00-11:30 (WSS, room 3)	Metabolic disorders - Carbohydrate Metabolism Disorders, Obesity, Metabolic Syndrome. 1. Pathogenesis of diabetes mellitus. 2. Pathophysiology of the obesity. Metabolic syndrome.	W. Matuszewski, MD, PhD	2 h
13	08.01.2026 13:30-15:00 (CSM, 100D)	Pathophysiology of pain. 1. Anatomical pathway of pain sensation. 2. The essence of pain, physiological pain and its meaning. 3. The pain levels of neuropathic lesions and proprioceptive pain. 4. Types of pain.	J. Kiewisz, M.Sc, PhD, DSc, prof. UWM	2 h
14	14.01.2026 13:30-15:00 (CSM Lecture Hall)	Pathophysiology of the aging process. 1. Physiology of the aging process and the principles of geriatric care, and knows the risks associated with hospitalization of the elderly. 2. The mechanisms of aging of the organism.	A. Skowrońska, DVM, PhD, DSc, prof. UWM	2 h

Olsztyn, 01.10.2025

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Coordinator of Pathophysiology Course

