

**Physiology lectures**  
SE EM, 2023/24. I. Semester  
EOK Szent-Györgyi Lecture Hall

Mo: 15:45- 17:30  
Wed:15:00- 16:45  
Thu: 8:00- 9:45

Week	No.	Date	Topic	Lecturer
1	1	4 Sep 2023 (Mon)	Introduction, fluid compartments	Prof. Péter Várnai
	2	6 Sep 2023 (Wed)	Transport across cell membranes	Prof. Péter Várnai
	3	7 Sep 2023 (Thu)	Transepithelial transports	Prof. Péter Várnai
2	4	11 Sep 2023 (Mon)	Plasma membrane receptors and their signal transduction I.	Prof. László Hunyady
	5	13 Sep 2023 (Wed)	Plasma membrane receptors and their signal transduction II.	Prof. László Hunyady
	6	14 Sep 2023 (Thu)	Intracellular receptors. Calcium metabolism of the cells. Vesicular transport.	Dr. András Balla
3	7	18 Sep 2023 (Mon)	Physiology of blood I., Blood groups	Dr. Levente Kiss
	8	20 Sep 2023 (Wed)	Physiology of blood II.	Dr. Levente Kiss
	9	21 Sep 2023 (Thu)	Membrane potentials	Prof. Péter Várnai
4	10	25 Sep 2023 (Mon)	Ion channels and action potential	Prof. Péter Várnai
	11	27 Sep 2023 (Wed)	Physiology of nerve cells, synaptic transmission in the central nervous system	Dr. Gábor Czirják
	12	28 Sep 2023 (Thu)	Autonomic neurotransmitters and physiology of smooth muscle	Dr. Zoltán Jakus
5	13	2 Oct 2023 (Mon)	Neuromuscular junction and physiology of skeletal muscle	Dr. Eszter Horváth
	14	4 Oct 2023 (Wed)	Physiology of the heart I.: origin and spread of cardiac excitation	Dr. Gábor Czirják
	15	5 Oct 2023 (Thu)	Physiology of the heart II.: cardiac cycle	Dr. Gábor Czirják
6	16	9 Oct 2023 (Mon)	Physiology of the heart III.: regulation of cardiac output	Dr. Gábor Czirják
	17	11 Oct 2023 (Wed)	Electro- and echocardiography	Dr. Gábor Czirják
	18	12 Oct 2023 (Thu)	Physiology of blood circulation: introduction, hemodynamics	Prof. Péter Várnai
7	19	16 Oct 2023 (Mon)	Arterial circulation	Prof. Péter Várnai
	20	18 Oct 2023 (Wed)	Microcirculation	Prof. Péter Várnai
	21	19 Oct 2023 (Thu)	Venous circulation and lymph flow	Dr. Zoltán Jakus
8	-	23 Oct 2023 (Mon)	-	
	22	25 Oct 2023 (Wed)	Local control of circulation	Dr. Eszter Horváth
	23	26 Oct 2023 (Thu)	Reflex control of circulation	Dr. Eszter Horváth
9	24	30 Oct 2023 (Mon)	Coronary circulation and circulation of blood in the brain	Dr. András Balla
	-	1 Nov 2023 (Wed)	-	
	25	2 Nov 2023 (Thu)	Skeletal muscle, splanchnic and skin circulation	Dr. András Balla
10	26	6 Nov 2023 (Mon)	Respiration I.: pulmonary ventilation	Prof. László Hunyady
	27	8 Nov 2023 (Wed)	Respiration II.: gas exchange	Prof. László Hunyady
	28	9 Nov 2023 (Thu)	Respiration III.: pulmonary circulation, ventilation-perfusion relationship	Prof. László Hunyady
11	29	13 Nov 2023 (Mon)	Respiration IV.: gas transport, hypoxias	Prof. László Hunyady
	30	15 Nov 2023 (Wed)	Respiration V.: control of respiration	Prof. László Hunyady
	31	16 Nov 2023 (Thu)	Renal function I.: renal circulation, glomerular filtration	Prof. Péter Enyedi
12	32	20 Nov 2023 (Mon)	Renal function II.: tubular functions	Prof. Péter Enyedi
	33	22 Nov 2023 (Wed)	Renal function III.: concentration, dilution	Prof. Péter Enyedi
	34	23 Nov 2023 (Thu)	Regulation of body fluids and osmotic concentration	Prof. Péter Enyedi
13	35	27 Nov 2023 (Mon)	Acid-base balance I.: introduction and the role of kidneys	Dr. Levente Kiss
	36	29 Nov 2023 (Wed)	Acid-base balance II.: the role of lungs and clinical implications	Dr. Levente Kiss
	37	30 Nov 2023 (Thu)	Adaptation of cardiovascular and respiratory system I.	Dr. Dávid Györi
14	38	4 Dec 2023 (Mon)	Adaptation of cardiovascular and respiratory system II.	Dr. Dávid Györi
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	-		Competition Exam	