

Programme of Lectures - Physiology 1

Academic Year 2026/2027 – WINTER TERM

1st week (Sept.14-18)	Introduction to Medical Physiology Physiology of Blood Volume, composition. Red blood cells. Erythrocyte sedimentation rate. Hemoglobin.
2nd week (Sept.21-25)	Blood groups. Transfusion. White blood cells. Basis of Immunophysiology
3rd week (Sept.28-Oct.2)	Platelets. Hemostasis, blood coagulation. Fibrinolytic system. Hematopoiesis – regulation. Cord Blood. Ontogenetic aspects.
4th week (Oct.5-9)	Physiology of Muscles. Skeletal and smooth muscle; differences in their functions. Ontogenetic aspects of muscles. Physiology of Nervous System. CNS- introduction, function.
5th week (Oct.12-16)	Somatomorphic reflexes. Control of posture and movement. Reticular formation. EEG. Sleep.
6th week (Oct.19-23)	Receptors. Pain. Physiology of senses I.
7th week (Oct.26-30)	Physiology of senses II. Memory, learning, speech
8th week (Nov.2-6)	Autonomic nervous system – functions, regulations, investigation methods. Higher functions of the nervous system.
9th week (Nov.9-13)	Conditioned reflexes, Emotions, behaviour, motivation, limbic system. Psychosomatic relationships.
10th week (Nov.16-20)	Renal Physiology Formation of urine – mechanisms; control. Urine, micturition.
11th week (Nov.23-27)	Physiology of the Endocrine System. Hypothalamic-hypophyseal axis. Physiology of thyroid gland. Parathyroid glands. Calcium homeostasis.

12th week (Nov.30-Dec.4)	Adrenal cortex. Adrenal medulla. Stress- neuroendocrine theory. Pineal gland. Other organs with endocrine function.
13th week (Dec.7-11)	Gonads. Physiology of female reproductive functions. Ontogenetic aspects of NS and hormonal regulations.
14th week (Dec.14-18)	Selected topic