

## Programme of **Lectures** in Physiology 2

**Semester**

**Summer**

**Academic Year**

**2020/2021**

**1st week  
(February 15-19)**

**Physiology of the Gastrointestinal System**

Mouth and oesophagus.  
Stomach.

**2nd week  
(February 22-26)**

Small intestine and colon. Pancreatic juice.  
Liver and biliary system.

**3rd week  
(March 1-5)**

Regulation of water and food intake.  
Metabolism. Physiology of nutrition.  
Ontogenetic aspects of the gastrointestinal system and metabolism.

**4th week  
(March 8-12)**

**Renal Physiology**

Formation of urine – mechanisms; control.  
Urine, micturition.

**5th week  
(March 15-19)**

**Physiology of Muscles.**

Skeletal and smooth muscle; differences in their functions.  
Ontogenetic aspects of muscles.

**Physiology of Physical Activity and Sport.**

**6th week  
(March 22-26)**

**Thermoregulation.** Fever.

**Physiology of the Nervous System.**

General neurophysiology and characteristics of the CNS.  
Receptors. Pain.

**7th week  
(March 29-April 4)**

Somatomeric reflexes.

Control of posture and movement.

Physiology of senses.

**8th week  
(April 5-9)**

Reticular formation. EEG. Sleep.

Memory, learning, speech.

**9th week  
(April 12-16)**

Hypothalamic functions. Autonomic nervous system.

Higher functions of the nervous system.

**10th week  
(April 19-23)**

Conditioned reflexes,

Emotions, behaviour, motivation, limbic system.

Psychosomatic relationships.

**11th week  
(April 26-30)**

**Physiology of the Endocrine System.**

Hypothalamic-hypophysial axis.

Physiology of thyroid gland.

**12th week  
(May 3-7)**

Adrenal cortex. Adrenal medulla. Stress- neuroendocrine

theory. Parathyroid glands. Calcium homeostasis.

Pineal gland. Other organs with endocrine function.

**13th week  
(May 10-14)**

Gonads. Physiology of female reproductive functions.

Ontogenetic aspects of NS and hormonal regulations

**14th week  
(May 17-21)**

Topic of choice (replacement week)