

**Thematic plan of independent work of the student
in the discipline "Physiology"
for students of the educational program
specialist degree
in the specialty 33.05.01 Pharmacy,
direction (profile) Pharmacy,
form of study full-time
for the 2023-2024 academic year**

№	The topic of independent work	Hours (academic)
1.	Basic structures and physiological processes ¹ . Physiological characteristics of the systemic activity of the body. The theory of functional systems, its basic principles and key mechanisms. Reflex and systemic organization of behavior. Behavior and psyche. Neurophysiological foundations of mental activity. Analytical and synthetic activity of the cerebral cortex. I.P. Pavlov teaching on the dynamic stereotype. Thinking, consciousness, speech. Physiological mechanisms of memory. Modern typology of human higher nervous activity. Emotional stress and resistance to it. Medical aspects of emotions. Motivation and its neurophysiological mechanisms. Modern ideas about sleep mechanisms ² .	10
2.	Integrative activity of the body ¹ . Physiological bases of adaptation. Adaptation of the body to various living conditions. Systemic mechanisms of pain. Physiological basis of pain relief. Mechanisms of analgesic effects. Ways to correct pain sensitivity. Antinociceptive system ² .	10
3.	Bioenergy ¹ . Physiological basics of rational work and rest regimes. Ways to improve human performance. Energy exchange during mental work. Theoretical basics of nutrition. Thermoregulation as a factor of homeostasis. The healing effects of thermal and cold procedures ² .	10
4.	Anatomical and functional systems of organs ¹ . Immunity, its types, characteristics. Immune system of the digestive tract. Microflora of the digestive tract. Regulation of erythropoiesis. Blood replacement solutions. The coagulation, anticoagulation and fibrinolytic systems of the blood as the main devices of the functional system for maintaining its liquid state. Physiological basis of cardiac arrhythmia. A functional system that maintains optimal blood pressure for metabolism ² .	6
5.	Control of independent work	2
	Total	38

¹ -Subject

² - essential content (if necessary)

Considered at the meeting of the department of Normal physiology "25" May 2023, protocol N 9 a

Head of the Department



S.V.Klauček