

Subject	PHYSIOLOGY			
Study program	Three years of graduate studies for physiotherapist			
Code	SF-119			
Academic year	First (I)			
Semester	First(I)			
Classes, total	55			
Credits	3.5			
Subject type	Obligatory			
Prerequisites	No			
Held by	Institute of physiology and anthropology			
Professor-Lecturer in charge	Prof d-r Vesela Maleska - Ivanovska			
Contact address	Institute of physiology and anthropology 50 Divizija b.b. 1000 Skopje tel: +389 2 3111774 e-mail: veselaivan@medf.ukim.edu.mk			
Key words	Professional studies for physiotherapist, basic subjects, physiology			
Study goals	▪ Understanding of the normal operation of of the human body. ▪ Understanding of the functioning of certain systems.			
Brief description	Theoretical classes: ▪ Functional mechanisms of homeostasis. ▪ Physiology of skeletal and smooth muscle ▪ Cell physiology. ▪ Physiology of blood ▪ Cardiovascular physiology. ▪ Physiology of the respiratory system. ▪ Physiology of gastrointestinal system. ▪ Thermoregulation. ▪ Physiology of the urinary system. ▪ Physiology of the nervous system. ▪ Physiology of the endocrine system. Laboratory practice: • Blood and blood elements. ▪ Heart and circulation. ▪ Nervous system –motion control. ▪ Senses.			
Organization	Theory lectures: 30 Laboratory practice lectures: 15 Seminars: 10			
Learning methods	Interactive lectures, laboratory practice and seminars.			
Expected results	Knowledge and understanding: The student will be able to know the functional characteristics and processes of organic systems and will be able to learn about the interrelationships and influences the control and regulation mechanisms of the human organism. Key skills: The student will be able to indicate the physiological processes and their regulatory mechanisms that take place in organic systems and will highlight their mutual influences.			
	The student is obliged to actively monitor all the activities, including participating in continuous knowledge checks to get a signature. Scoring the student activities: <table><tr><td>Type of activity</td><td>Points</td></tr></table>		Type of activity	Points
Type of activity	Points			

Specific recommendations		Min	Maks
	Theoretical classes	6	10
	Practical classes	16	20
	Seminar	8	10
	Continuous checks -	15	30
	Final exam	15	30
	Total:	60	100
	Knowledge assessment criteria: 1. A 60% Point Score Minimum (per examination) is needed in order to attend final exam 2. If PSM (Point Score Minimum) not obtained, the student is allowed a complete final exam (the colloquial exam and final exam included).		
Contiuous knowledge assesment	Continuous checks of knowledge - 1 tests (written) Cell physiology, physiology of respiration, cardiovascular physiology, physiology of gastrointestinal system, physiology of metabolism, physiology of the liver and thermoregulation 15-30 points Final exam: written Physiology of the urinary system , nervous system and endocrine system 15-30 points Complete final exam*: test is a combination of continuous check which has not been passed and final exam. * Student completed and / or complete the final examination may occur only after receiving credits (passed) on the subject anatomy. *Assessment of the overall exam is obtained according to the table grades, based on the sum of points from all activities, including continuous checks and points from every part of the final or complete the final exam.		
Recommended literature	1. Guyton AC, Hall JE. Textbook of Medical Physiology 12 th edition. Elsevier, London, 2011 2. Dejanova B, Petrovska S, Todorovska L. Physiology of certain organ systems. Skopje, 2012 3. Selected chapters of physiology (internal script of Institute of physiology), Skopje,2009 4. Efremovska Lj and all. Practicum in Physiology. Skopje 2012 5. Despopoulos A, Silbernagl S. Color atlas of Physiology. New York, 2003 6. Costanzo LS. Physiology Elsevier, London, 2006		