Course Title	**Physiology II**				
Course Code	MD210				
Course Type	Compulsory				
Level	1st Cycle (MD)				
Year / Semester	2nd year/ 3rd semester				
Teacher's Name	TBA				
ECTS	6	Lectures / week	3 hrs / 14 weeks	Laboratories / week	4 hrs / 14 weeks
Course Purpose and Objectives	The course is intended to provide a broad and extensive function overview of the physiology of the systems of the human body. The course is intended to familiarize students with the physiology of the various systems of the human body, namely respiratory, cardiovascular, gastrointestinal, renal and reproductive systems. The purpose of the course is to explain the physiological basis of systems homeostasis and to introduce basic mechanisms which are deranged in disease. This will allow students to proceed to more advanced medical courses such as pathophysiology and semiology				
Learning Outcomes	Upon successful completion of this course students should be able to: • Discuss the mechanics of pulmonary ventilation • Discuss and summarize pulmonary volumes and capacities • Discuss the pulmonary circulation and its derangements (pleural effusion, pulmonary oedema) • Describe the principles of gas exchange through the respiratory membrane • Summarize the transport of oxygen and carbon dioxide in blood and tissue fluids • Summarize the regulation of respiration • Describe the rhythmical excitation of the heart • Discuss and interpret the normal ECG • Discuss the various arrhythmias and their electrocardiographic interpretation • Discuss the Local and Humoral Control of Tissue Blood Flow • Describe the Nervous Regulation of the Circulation and Rapid Control of Arterial Pressure • Discuss the Cardiac Output, Venous Return, and Their Regulation • Describe Muscle Blood Flow and Cardiac Output During Exercise; the Coronary Circulation and Ischemic Heart Disease • Discuss Heart Valves and Heart Sounds				

	• Describe Glomerular Filtration, Renal Blood Flow, and Their Control and Renal Tubular Reabsorption and Secretion • Summarize acid base regulation from biochemistry • Describe the general Principles of Gastrointestinal Function • Discuss the Reproductive and Hormonal Functions of the Male • Describe Female Physiology Before Pregnancy and Female Hormones • Perform and understand the physiologic principles in simulation scenarios related to the physiology of the major organ systems • Discuss and identify the physiologic processes underling disease processes in clinical cases of the of the major organ systems		
Prerequisites	None	Co-requisites	None
Course Content	• The physiology and the basic physiology disorders of the respiratory system • The cardiac muscle, the heart as the pump and the functions of the valves • The creation of the normal and abnormal ECG • Heart failure and its causes (right versus left) • The physiology of the renal system (absorption, re-absorption, secretion of ions) and their basic derangements • Arterial blood gas analysis • The physiology of the alimentary system, mixing absorption and propulsion and their derangement • The physiology of the male and female hormonal system • Simulation patients • Clinical Cases		
Teaching Methodology	Face-to-face		
Bibliography	Guyton and Hall Textbook of Medical Physiology; John E. Hall; 978-1416045748; Saunders; Kumar and Clark's Clinical Medicine, by: Parveen Kumar & Michael L Clark. Published: Physiology, by Linda Costanzo. Published:		
Assessment	Examinations: 70% Assignment/Lab 20% Class Participation: 10%		
Language	English		