

Course Title	Physiology I				
Course Code	MD135				
Course Type	Compulsory				
Level	1 st Cycle (MD)				
Year / Semester	1 st Year / 2 nd Semester				
Teacher's Name	TBA				
ECTS	6	Lectures / week	2 hrs / 14 weeks	Laboratories / week	4 hrs / 14 weeks
Course Purpose and Objectives	<p>The course is intended to give the students a broad overview of specific structures of the human body and their related physiology. The course is intended to familiarize students with the basic concepts of physiological procedures and to allow them to proceed to more advanced biomedical and medical courses</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Explain the physiological anatomy of the muscles and apply their knowledge from biology to analyze the components of muscle contraction • Describe remodeling of muscle to match contraction • Interpret the role of acetylcholine in muscle contraction • Describe the control of muscle contraction • Describe the molecular and cellular composition of blood. • Discuss the general functions of each one of the blood cell types. • Interpret a full normal blood cell count and blood serum • Explain the principles of blood haemostasis and coagulation. • Identify the various characteristics of the innate and adaptive responses of the human immune system. • Interpret Body temperature regulation • Summarize the role of systemic chemical messengers (hormones) • Discuss pituitary hormones and their regulation by the hypothalamus • Discuss the thyroid hormones • Describe the function of adrenocortical hormones • Describe the role and function of insulin and glucagon • Discuss the function of parathyroid hormone, calcitonin & vitamin D • Perform and understand the physiologic principles in simulation scenarios related to muscle physiology, hemopoietic function and endocrine processes 				

	<ul style="list-style-type: none"> • Discuss and identify the physiologic processes underlying disease processes in clinical cases of the musculoskeletal, hemopoietic-lymphoid and endocrine systems. 		
Prerequisites	None	Co-requisites	None
Course Content	<p>In that regard, students will familiarize themselves with:</p> <ul style="list-style-type: none"> • Muscle physiology • Calcium metabolism in bones • The components of the hemopoietic system, along with their function • Blood types and blood transfusion • Types of immunity and allergic reactions • Skin and its role in thermoregulation • The exocrine and endocrine system <p>Laboratory Exercises</p> <ul style="list-style-type: none"> • Simulation patients • Clinical Cases 		
Teaching Methodology	Face-to-face		
Bibliography	<p>Guyton and Hall Textbook of Medical Physiology; John E. Hall; 978-1416045748; Saunders;</p> <p>Kumar and Clark's Clinical Medicine, by: Parveen Kumar & Michael L Clark. Published:</p> <p>Physiology, by Linda Costanzo. Published:</p>		
Assessment	Examinations:	70%	
	Assignment/Lab	20%	
	Class Participation:	10%	
Language	English		