

Course Title	Histology - Embryology I				
Course Code	MD130				
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>This course is intended to familiarize students with the microstructure (histology) and evolution (embryology) of the musculoskeletal system, as well as the integumentary, endocrine, hemopoietic and lymphatic systems of the body, and obtain an understanding of their regional histology to describe structures and their relationships to each other. It is designed to acquaint Medical students with the fundamental terms, concepts, and principles of the above systems and their cellular population and extracellular matrix morphological functions and structure and to integrate microstructure tissue formation (histology) with evolution of human development (embryology) of the above described systems. It will serve as a connective foundation upon which, Structure and Function courses as Anatomy-Histology-Embryology-Physiology and Biochemistry in Medical sciences will be based.</p> <p>The course is designed to integrate with lectures, laboratories, group discussions, Computer Assisted Learning (CAL) and clinical case problems, a microscopical visualization of those systems' microstructures (in histology) and their development (in embryology), with structure (anatomy) and function (physiology) and enable students to use that knowledge to solve problems in clinical cases.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> • Demonstrate the understanding of the normal microstructure and evolution of the human body with emphasis on the musculoskeletal, integument, exocrine, endocrine, hemopoietic and lymphatic systems. • Illustrate, recognize, identify and describe under the microscope the microstructure and function of the musculoskeletal, integument, exocrine, endocrine, hemopoietic and lymphatic systems • Describe and demonstrate an understanding of microscopic organization under diverse types of microscope, the relationships of the cells , the extracellular matrix and the tissues constituting 				

	the organs and systems of the musculoskeletal, integument, exocrine, endocrine, hemopoietic and lymphatic systems		
Prerequisites	None	Co-requisites	None
Course Content	<ul style="list-style-type: none"> • Microstructural organization and development of the Musculoskeletal system and its disorders. • Morphological organization and development of the Integumentary System and its disorders. • Morphological organization and development of the Exocrine System and its disorders. • Morphological organization and development of the Endocrine System and its disorders. • Hemopoiesis. • Morphological organization and development of the Hemopoietic System and its disorders. • Morphological organization and development of the Lymphatic System and its disorders. <p>Laboratory exercises:</p> <ul style="list-style-type: none"> • Observations of Microstructural organization and development of the Musculoskeletal system using light and electronic microscope photographs ,videos and Computer Assisting Learning. 		
Teaching Methodology	Face- to- face		
Bibliography	<p>Junqueira’s Basic Histology: Text & Atlas; Antony L. Mesher, PhD, Mc Graw Hill Education LANGE, Juan,Seoul,Singapore,Sydney, Toronto ISBN 978-1-259-07232-1,or, MHID 1-259-07232-0</p> <p>Netter’s Essential Histology; William Ovalle,Patrick C. Nahirney, Illustrations by Frank H. Netter; Elsevier Saunders Philadelphia, ISBN 978-1-4557-0631-0</p> <p>Human Histology; Stevens, A. / Lowe, J.S; 978-0323036634; Mosby;</p> <p>Color Atlas of Histology; Leslie G. Gartner; 978-1451107210; Lippincott Williams and Wilkins;</p> <p>Color Atlas of Cytology, Histology, and Microscopic Anatomy. Wolfgang Kuehnel, Thieme. Stuttgart-New York. ISBN 3-13-562404-8 (GTV), ISBN 1-58890-175-0 (TNY),</p> <p>Before we are born. Essentials of Embryology and Birth Defects. Keith L. Moore, T.V.N. Persaud, Mark G. Torcha. Philadelphia, Elsevier Saunders Edition, ISBN 978-1-4377-2001-3</p>		

Assessment	Examinations: 70% Assignment/Lab 20% Class Participation: 10%
Language	English