

Jordan University of Science and Technology Faculty of Medicine Doctor Of Medicine Department

MED321 Endocrine System

First Semester 2021-2022

Course Catalog

6 Credit Hours. Homeostasis of human body function is achieved through the complex interplay of several chemical messenger systems. These systems achieve a finely tuned coordination between the multiple activities of the cells, tissues and organs of the body. The collective action of these systems results in a stable internal environment compatible with the requirements of human life on this planet. The above system is generally composed of the following: 1. Neurotransmitters 2. Endocrine hormones 3. Neuro-endocrine hormones. 4. Paracrines 5. Autocrines 6. Cytokines In this module, we will study the role of the endocrine system in maintaining homeostasis of the human body, keeping in mind that the function of this system is completely appreciated in isolation from the role played by the other chemical messenger systems. Indeed, interaction between these systems is an absolute requirement to achieve homeostasis. For example, the adrenal medullae and the pituitary gland secrete their hormones primarily in response to neural stimuli. We will also study how disruption of the endocrine system results in several disease states that could become endemic in nature (i.e: Diabetes Mellitus). Finally, we will go over major pharmacological remedies that attempt to regain homeostasis by directly modulating different components of this system.

	Text Book
Title	Clinical Anatomy by Regions
Author(s)	R.S. Snell
Edition	9th Edition
Short Name	Anatomy Ref #1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Anatomy Ref #2	Principles of Human Anatomy	G.J. Tortora	11th Edition	
Anatomy Ref #3	Basic Histology	L. Carlos Junqueira	12th Edition	

Anatomy Ref #4	Before we are born. By , Latest edition.	K.L. Moore and T.V.N. Persaud	8th Edition	
Biochemistry Ref#1	Textbook of Biochemistry with Clinical Correlations	Thomas M. Devlin	7th Edition	
Biochemistry Ref #2	Clinical chemistry. Principles, techniques and correlations	Bishop, Fody and Schoeff	7th Edition	
Physiology Ref #1	Textbook of Medical Physiology, by , latest edition.	Guyton and Hall	14th Edition	
Physiology Ref #2	Review of Medical Physiology	William F. Ganong	26th Edition	
Pathology Ref #1	Essential Pathology	Emanuel Rubin	6th Edition	
Pathology Ref #2	Basic Pathology	Kumar, Cotran and Robbins	10th Edition	
Pharmacology Ref#1	Lipincott?s Illustrated Reviews: Pharmacology, Latest edition.	Karen Whalen	7th Edition	

Instructor	
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Office Hours	
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Class Schedule & Room

Section 1:

Lecture Time: Mon, Wed: 08:30 - 10:00

Room: M1305

Teaching Assistant

Mrs. Malak Shatnawy(Section 1), Mrs. Esraa Ghozlan(Section 1)

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
To know the structures of the various endocrine glands, their development, their histology and their blood supply.	13%	
To be familiarized with the classification of the hormones, their basic structure, their mechanism of action and their synthetic pathways.	18%	
To comprehend the the regulation of hormone synthesis and secretion	10%	

To comprehend the physiological role of hormones in achieving homeostasis, including their interaction with the other chemical messenger systems of the body.	23%	
To understand the pathogenesis, morphological changes and the complications associated with the disruption of endocrine function.	17%	
To comprehend the use of hormones and their derivatives in the diagnosis and treatment of the various endocrine disorders.	12%	
To be familiarized with the Public health issues associated with the more common endocrine disease in Jordan, in the region and elsewhere in the world.	7%	

Relationship to Program Student Outcomes (Out of 100%)
SO1-ES

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