

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Endocrine system
Course number	MDCN3412
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	3
Credit hours (practical)	1
Course Prerequisites	

Course Objectives

1	- Describe the anatomical and histological structure, development, and function of the different organs of the endocrine system
2	- Describe the various pathologic diseases affecting the endocrine system and understand their mechanisms.
3	- Describe drugs used in the treatment of various endocrine diseases and discuss the epidemiology of those diseases, their prevention and control

Intended Learning Outcomes

Knowledge and Understanding	<ul style="list-style-type: none"> * Demonstrate a sufficient understanding of the structural organization and functions of the following systems of the human body: circulatory, respiratory, gastrointestinal, endocrine, hematopoietic & lymphatic, musculoskeletal, nervous, and genitourinary systems * Conceptualize the cellular, molecular, genetic, and biochemical mechanisms that maintain body's homeostasis and their derangements in disease states.
Intellectual Skills	<ul style="list-style-type: none"> * Apply their knowledge of human anatomy and function to solve questions regarding major clinical cases and disease
Professional Skills	<ul style="list-style-type: none"> * Demonstrate proficiency in performing clinical skills and procedure
General Skill	<ul style="list-style-type: none"> * Communicate ideas and arguments effectively * Respect superiors, colleagues and any other members of the health profession.

Course Contents

- 1 - Anatomy of hypothalamus and hypophysis. Anatomy of the endocrine glands (thyroid, parathyroid, thymus and adrenal gland)
- 2 - Embryology of endocrine gland
- 3 - Histology of endocrine system
- 4 - Hypothalamus releasing factors and neurohypophysis of the pituitary gland hormones
- 5 - Pathology of adenohypophysis and neurohypophysis of the pituitary gland Pharmacology of hypothalamic and hypophysis hormones
- 6 - Introduction biochemical endocrinology Signal transduction, 2nd messengers and receptors:
- 7 - Mechanism of hormone actions
- 8 - Biochemical aspects of thyroid hormones metabolism
- 9 - Pathology of thyroid and parathyroid glands
- 10 - Pharmacology of parathyroid
- 11 - Diabetes mellitus and insulin
- 12 - Insulin and oral hypoglycaemic agents
- 13 - Pathology of the adrenal gland
- 14 - Autoimmune diseases of the endocrine system

Teaching and Learning Methods

- 1 - interactive lectures
- 2 - case scenario simulation of common clinical cases
- 3 - videos and simulation labs

Teaching and Learning Methods for the Disabled Students

- 1 - Help each student according to his needs and his condition
- 2 - Lectures

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
paper 1 exam	60	50
paper 2 exam	60	35
practical exam	50	15

Books and References

Course note	doctors lectures notes
Essential books	<ul style="list-style-type: none">- Clinical anatomy by systems, R.S. Snell, (latest edition)- Textbook of Medical Physiology, by Guyton and Hall, (latest edition)- Pharmacology, Lippincott's Illustrated Review, (latest edition)- Basic Histology, by L.Carlos Junqueira, Jose Carneiro, Robert O. Kelley, (latest edition)
Recommended books	<ul style="list-style-type: none">- Review of Medical Microbiology and Immunology, Levinson, W. (latest edition)