



Course Specifications

Course Title:	Endocrine Block
Course Code:	END231
Program:	Bachelor of Medicine, Bachelor of Surgery (MBBS)
Department:	NA
College:	College of Medicine
Institution:	Alfaisal University

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A. Course Identification

1. Credit hours: 2 (1+2+0)
2. Course type
a. University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: Sem 3, Year 2
4. Pre-requisites for this course (if any): Sem 1 and 2
5. Co-requisites for this course (if any): None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	17	46%
2	PBL, Labs	20	54%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	17
2	Laboratory/Studio	
3	Tutorial	20
4	Others (specify)	
	Total	37

B. Course Objectives and Learning Outcomes

1. Course Description

The basic objective of this block is to help students comprehend how the hypothalamus controls the body functions through its effects on endocrine hormones secreted from various glands of the body. The ultimate goal of the block is to foster enough understanding of the normal structure and function of endocrine systems among students so that they can understand the pathological processes and management of different endocrine disorders in the next phase of the curriculum.

2. Course Main Objective

By the end of this course, the students should know the hypothalamic-pituitary axis and its function in controlling the endocrine and reproductive systems. They should also be familiar with the anatomy, embryology, and physiology (including mechanisms of control, biosynthesis, secretion, transport, effects on organs/cells, and degradation of various hormones) of the major endocrine organs and their systems.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Understand the biosynthesis, mechanism of transport, hormone action and degradation of aldosterone	PLO1,3,5
1.2	Describe the biosynthesis, mechanism of transport, hormone action and degradation of growth hormone	PLO1,3,5
1.3	Characterize the biosynthesis, mechanism of transport, hormone action and degradation of thyroid and parathyroid hormone	PLO1,3,5
1.4	Describe the basic principles of hormone secretion transport action and degradation.	PLO1,3,5
1.5	Explain the role of hypothalamus in controlling endocrine functions of the body	PLO1,3,5
1.6	Characterize mechanisms of regulation of serum blood glucose	PLO1,3,5
2	Skills :	
2.1	Identify gross features of thyroid gland and its relations	PLO5
3	Values:	
3.1	Adhere to the attendance policy.	
3.2	Maintain professional conduct with colleagues, faculty, and staff.	

C. Course Content

No	List of Topics	Contact Hours
1	Hormones: As a control system of body	1
2	Hormones: General mode of action and function,	1
3	Pituitary gland: Gross & micro structure and development - I	1
4	Pituitary gland: Gross & micro structure and development - II	1
5	Anterior pituitary hormones: Control mechanism and function - I	1
6	Anterior pituitary hormones: Control mechanism and function - II	1
7	Posterior pituitary hormone: Control mechanism and function	1
8	Thyroid and parathyroid gland: Gross & micro structure	1
9	Thyroid hormones: Control mechanism and function - I	1
10	Thyroid hormones: Control mechanism and function - II	1
11	Adrenal gland and endocrine pancreas: Gross & micro structure	1
12	LAB: Pituitary Glands & Thyroid Glands-Pituitary & Thyroid I	2
13	LAB: Histology pituitary and thyroid	2
14	PBL: Graves' Disease-Clinical	4
15	Adrenocortical hormones I	1
16	Adrenocortical hormones II	1
17	Insulin and glucagon: Control mechanism and function I	1
18	Insulin and glucagon: Control mechanism and function II	1
19	LAB: Pituitary Glands & Thyroid Glands II	2
20	LAB: Clinical Pituitary Glands & Thyroid Glands	2
21	PBL: A Sweet Guy-(Diabetes)	4
22	Diabetes mellitus and metabolic syndromes	1
23	Endocrine glands: Development	1
24	LAB: Parathyroid, Adrenal & Pancreases	2
25	LAB: Parathyroid, Adrenal & Pancreases-Histology	2

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Understand the biosynthesis, mechanism of transport, hormone action and degradation of aldosterone.	Lectures, Labs, PBLs	Summative assessment
1.2	Describe the biosynthesis, mechanism of transport, hormone action and degradation of growth hormone.	Lectures, Labs, PBLs	Summative assessment
1.3	Characterize the biosynthesis, mechanism of transport, hormone action and degradation of thyroid and parathyroid hormone.	Lectures, Labs, PBLs	Summative assessment
1.4	Describe the basic principles of hormone secretion transport action and degradation.	Lectures, Labs, PBLs	Summative assessment
1.5	Explain the role of hypothalamus in controlling endocrine functions of the body.	Lectures, Labs, PBLs	Summative assessment
1.6	Characterize mechanisms of regulation of serum blood glucose.	Lectures, Labs, PBLs	Summative assessment
2.0	Skills		
2.1	Identify gross features of thyroid gland and its relations	Labs	Summative assessment
3.0	Values		
3.1	Adhere to the attendance policy.		Continuous assessment
3.2	Maintain professional conduct with colleagues, faculty, and staff.		Continuous assessment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	PBL	1,2	5%
2	Final Exam	3	95%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

The CoM program established its own mentorship program that employs all full-time faculty as mentors. Through this program, every medical student in the program is assigned a mentor at the beginning of their first semester of studies. The program has a broad scope covering academic advising and counseling. The mentors handle all aspects related to academic

advising, including academic planning, academic performance review, advice on course drop or withdrawal, study skills, and time management.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<ul style="list-style-type: none"> • Clinical Anatomy by Regions-Richard Snell • Histology: A Text and Atlas by MH Ross & W Pawlina: 6th edition • Textbook of Medical Physiology, Guyton & Hall, Thirteenth Edition, Published by Saunders Elsevier, 2016. ISBN: 978-1-4557-7005-2 (13th Edition) • Biochemistry By Pamella et al (Lippincott) Langman's Medical Embryology-Sadler, Lippincott Williams and Wilkins, • Linda S Costanzo, 4th Ed. Human Physiology
Essential References Materials	
Electronic Materials	PowerPoint presentations uploaded on Alfaisal E-learning Portal
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, Laboratories
Technology Resources (AV, data show, Smart Board, software, etc.)	AV (Audio-Visual), Smartboard, Moodle (E-learning Management)
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course and Faculty Evaluation Survey	Students	Survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	