

COURSE PLAN

FIRST: BASIC INFORMATION

College					
College	: Medicine				
Department	: Basic Medical Sciences				
Course					
Course Title	: Endocrine System				
Course Code	: 31500321				
Credit Hours	: 4				
Prerequisite	: None				
Instructor					
Name	: Mohammad Shaban. Course coordinator + other staff members as per subject.				
Office No.	:				
Tel (Ext)	:				
E-mail	: Shabaan@bau.edu.jo				
Office Hours	: Sunday , Monday, Wednesday 10-12				
Class Times		Day	Start Time	End Time	Room No.
	Online course on microsoft Teams	Sunday, Monday, Tuesday Wednesday & Thursday	8:00	2:00 pm	
Text Books					

ANATOMY:

- 1.Principles of Human Anatomy. By G.J. Tortora, Latest edition.
- 2.Clinical Anatomy for Medical Students. By R.S. Snell, Latest edition.
- 3.Basic Histology, by L. Carlos Junqueira. Latest edition.
4. Before we are born. By K.L. Moore and T.V.N. Persaud, Latest edition.

BIOCHEMISTRY:

- 1.Biochemistry by Campbell & Farrell ,latest edition
- 2.Lippincott's Illustrated Reviews "Biochemistry" , latest edition

PHYSIOLOGY:

1. Textbook of Medical Physiology, by Guyton and Hall, Latest edition,
2. Review of Medical Physiology, by William F. Ganong, latest edition,.

PATHOLOGY:

Basic Pathology, by Kumar, Cotran and Robbins, Latest edition.

PHARMACOLOGY:

Lipincott's Illustrated Reviews: Pharmacology, Latest edition.

COMMUNITY MEDICINE:

Supplementary Departmental handouts.

SECOND: PROFESSIONAL INFORMATION

COURSE DESCRIPTION

This course covers the endocrine system from the standpoints of anatomical and histological structure, hormones including their structures, functions, mechanisms of action receptors, and their metabolism in addition to the endocrinology disorders including hyperactivity or hypoactivity, immune-mediated diseases, benign and malignant tumors and pharmacological properties of hormones and drugs used in the treatment of endocrine diseases. The course is concluded by studying the clinical aspects of the endocrine system including signs, symptoms and disease presentation. This course covers the basic structure of hormones, mechanism of actions, physiological functions And abnormality of hormone secretions. The histological structures and drugs used in different disease states.

COURSE OBJECTIVES

By the end of this course, students are expected to understand:

1. Structures of various endocrine glands, their development, their histology and their blood supply.
2. The nature, functions, physiologic roles and mechanisms of action of hormones.
3. Hormone regulation and effects of endocrine functions.
4. Pathogenesis, morphological changes and complications of diseases affecting the endocrine system.
5. The use of hormones and drugs in diagnosis and treatment of endocrine disorders.

SPECIFIC LEARNING OBJECTIVES WILL BE GIVEN BY EACH INSTRUCTOR AT THE BEGINNING OF EACH LECTURE

COURSE LEARNING OUTCOMES

- 1) Knowledge and Understanding
 1. The structures of various endocrine glands, their development, their histology and their blood supply.
 2. The nature, functions, physiologic roles and mechanisms of action of hormones. Hormone regulation and effects of endocrine functions.
 3. Pathogenesis, morphological changes and complications of diseases affecting the endocrine system.
 4. The use of some hormones and drugs in diagnosis and treatment of endocrine disorders
- 2) Professional Skills

The student should be able to differentiate the different endocrine disorders.



- 3) Competences (Transferable skill and attributes)
The student should be able to differentiate the different investigations required for each endocrines disorder

COURSE SYLLABUS COURSE LEARNING RESOURCES

Lectures, Labs, clinical case discussion, video sessions and seminars.

WEEKLY SCHEDULE OF THE ENDOCRINE SYSTEM # 31500321 SPRING 2020

Week 1

TIME	SUN DEC 20	MON DEC 21	TUE DEC 22	WED DEC 23	THR DEC 24
8-9				FINAL RESPIRATORY SYSTEM	
9-10					
10-11					Immunology 20
11-12					1.Introduction to the ES (course coordinator) (PHYS 1) د محمد شعبان
12-1					2.Morphology of the endocrine gland(ANAT 1) د ماهر
1-2					

WEEKLY SCHEDULE OF THE ENDOCRINE SYSTEM # 31500321 FALL 2020

Week 2

TIME	SUN DEC 27	MON DEC 28	TUE DEC 29	WED DEC 30	THR DEC 31
8-9					
9-10			Anatomy lab		
10-11	Immunology 21	Immunology 21			
11-12	3. Histology and embryology of the endocrine glands 1 (ANAT 2) د ماهر	6. Histology and embryology of endocrine glands 3(ANAT 4) د عبد الأمير	9. Pituitary gland (3) (PHYS 4)	12. Biochemistry of thyroid gland hormones metabolism (BCHM 2)	15. Pharmacology of anterior pituitary hormones (PHRM 2) د خولة
12-1	4. Histology and embryology of endocrine glands 2(ANAT 3) د عبد الأمير	7. Mechanism of hormone actions (BCHM 1) د نبيل	10. Pathology of ant and post pit gland (PATH 1)	13. Thyroid hormones (BCHM 3)	16. Path of the thyroid and parathyroid glands (PATH 2)
1-2	5.Hypothalamic Pituitary gland	8. Pituitary gland (2) (PHYS 3) د	11. Pharmacology of	14. Calcium & phosphate	17. Path of the thyroid and



	axis (1) (PHYS 2) د محمد شعبان	محمد شعبان	hypothalamic hormones (PHRM1) د خولة	homeostasis (PHYS 5)	parathyroid glands (PATH 3)
2-3					

WEEKLY SCHEDULE OF THE ENDOCRINE SYSTEM # 31500321 FALL 2020

WEEK 3

TIME	SUN JAN 3	MON JAN 4	TUE JAN 5	WED JAN 6	THR JAN 7
			FREE	FREE	FREE
8-9					
9-10					
10-11	Immunology 22	Immunology 22			
11-12	18. Thyroid and anti thyroid drugs (PHRM 3) د خولة	21. Regulation of blood glucose metabolism & DM (BCHM 4)			
12-1	19. Hormonal control of calcium metabolism (PHYS 6)	22. Endocrine function of the pancreas (PHYS 7)			
1-2	20. Pharmacology PTH , Vit D & calcitonin (PHRM 4) د خولة	23. Glucose homoeostasis (PHYS 8)			
2-3					

WEEKLY SCHEDULE OF THE ENDOCRINE SYSTEM # 31500321 FALL 2020

WEEK 4

TIME	SUN JAN 10	MON JAN 11	TUE JAN 12	WED JAN 13	THR JAN 14
8-9					
9-11		PATH LAB	PATH LAB		
11-12	MIDTERM EXAM	24. Pathology of the endocrine pancreas (PATH 4)	27. Adrenal gland physiology (PHYS 9)	29. Pathology of the adrenal glands (PATH 5)	31. Pharmacology of mineralocorticosteroids (PHRM 6) د خولة
12-1		25. Steroidogenesis (BCHM 5)	28. Adrenal gland physiology (PHYS 10)	30. Endocrine function of unusual tissues Heart and kidney (PHYS 11)	32. Epidemiology of DM disease (CM1) د طارق



1-2		26. Insulin and hypoglycemic agents (PHRM 5) د خولة	Immunology 23		33. Pharmacology of glucocorticoids (PHRM 7) د خولة
2-3		Immunology 23	Immunology Discussion		Immunology Discussion

**WEEKLY SCHEDULE OF THE ENDOCRINE SYSTEM # 31500321 FALL 2020
WEEK 5**

TIME	SUN JAN 17	MON JAN 18	TUE JAN 19	WED JAN 20	THR JAN 21
					FINAL EXAM
11-1	CLINICAL LECTURE	REVISION ANAT	REVISION PHYS	REVISION PATH	
2-1		REVISION BCHM	REVISION PHRM		

ONLINE RESOURCES

This system is taught by more than one staff. Each staff is free to give online links to the students as learning resources.

ASSESSMENT TOOLS

ASSESSMENT TOOLS	%
Mid Exam (Theory)	35
Final Exam (Theory + Practical's + Clinical Cases)	65
TOTAL MARKS	100

<u>SUBJECT</u>	<u>WEIGHT FROM THE FINAL GRADE</u>
ANATOMY	10%
BIOCHEMISTRY	13%
PHYSIOLOGY	28%
PATHOLOGY	13%
PHARMACOLOGY	18%
COMMUNITY MEDICINE	3%



ANATOMY PRACTICAL	5%
PATHOLOGY PRACTICAL	10%

THIRD: COURSE RULES

ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class. Absence of 10% will result in a first written warning. Absence of 15% of the course will result in a second warning. Absence of 20% or more will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

Use of Mobile Devices, Laptops, etc. During Class, unexpected noises and movement automatically divert and capture people's attention, which means you are affecting everyone's learning experience if your cell phone, laptop, etc. makes noise or is visually distracting during class. For this reason, students are required to turn off their mobile devices and close their laptops during class.

GRADING SYSTEM

According to the roles approved by the faculty council which depend on the mean and standard deviation to determine percent of students in a specific letter

*Percentages are according to the number of students who passed the exam.

REMARKS

COURSE COORDINATOR

Course Coordinator: Dr. Mohammad Shaban - Department of Basic Sciences

Signature:

Signature:

Date: DEC 20 2020