Course Description Template

University Name: Warith Al-Anbiya.
Faculty/Institute: Collage of medicine
Scientific Department: medical education
Academic or Professional Program Name: unit 10 / 3rd stage
Final Certificate Name: .....
Academic System: Integration System
Description Preparation Date: 27/8/2025
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Signature:
Head of Branch: Dr. Fatima M. Swadi
Date: 27/8/2025

Signature:
Vice Dean for Scientific Affairs: Dr. Laith M. Abbas
Date: 27/8/2025

The file is checked by:
Department of Quality Assurance and University Performance
Director of the Quality Assurance and University Performance Department: professor Dr. Ali Al Mousawi
Date: 27.8.2025

Signature:

Dean's approval

Endocrinology Code : medu304

1. Anatomy

	ANATOMY	HISTOLOGY	EMBRYOLOGY	hr
	WK1			
	pituitary gland	Histology of pituitary gland	Embryology of pituitary gland	2+2 +1
lab	1hr anatomy (pituitary gland) + 1hr Histology of pituitary gland			2
	WK2			
	Triangles of the neck		pharyngeal apparatus	2+2
	surgical anatomy of thyroid gland	Histology of thyroid gland		2
lab	**1hr anatomy (triangles of neck & cervical viscera) + 1hr histology of thyroid gland**			2
	WK3			
	adrenal gland	Histology of adrenal gland	Embryology of gland	5
lab	**1hrAnatomy (posterior abdominal wall& adrenal gland)+ 1hr histology of the adrenal gland**			2
	WK4			
		Histology of endocrine part of pancreas		2
lab	**Histology(endocrine part of pancreas)**			2
نظري	**8**	**8**	**4**	**20**
عملي	**3**	**5**		**8**

2. Physiology

Weeks	Objectives/Theory	Hours	Objectives /Practical	Hours
1	***Endocrine system overview:*** 1. Discuss the concept of hormone and its specific recognition by receptors 2. Identify the endocrine glands of the body and their major functions 3. Describe the transport mechanisms of hormones in the body 4. Identify the physiologic relationship of hypothalamus and pituitary with other target endocrine glands ***Hormones overview*** 1. Chemical structure of hormones 2. Mech. of signal transduction 3. Identify different methods of hormonal measurement ***Physiology of the growth hormone (GH):*** 1. Chem. structure 2. Secretion of 3. Regulatory mechanism of 4. Mode of action 5. Biochemical action 6. Physiological functions of 7. Signs and symptoms of GH disorders 8. Antagonism of GH to insulin Growth hormone production by recombinant DNA	4		
2	***Peripheral actions of thyroid hormones:*** 1. Identify the major classes of thyroid hormones	2		

	2. Describe their cellular mech. Of action 3. Describe the biological effects of thyroid hormones Discuss the effects of under- or over-secretion of thyroid Hormones			
3	• ***Adrenal structure and function:*** Discuss the factors regulating secretion of adrenal cortical and medullary hormones • ***Adrenal gland disorders:*** 1. Describe common presenting signs of under- and over- secretion of ad. Hormones Discuss the way in which these signs relate to our understanding of adrenal physiology	2		
Total hours		8		

3. Pathology

weeks	Theory objectives	Theory /hours	Practical objective	Practical/ hours
Week 1	Pathology of pituitary gland: - Ischemic necrosis (Sheehan synd.) - Ablation (surgery, radiation), - Inflammation (Sarcoidosis, TB) - Trauma, metastasis 2. Diabetes insipidus 3. Pituitary adenomas: Histology and immunohistochemistry (IHC)	2		
Week 2	- Pathology of thyroid and parathyroid glands: - Hyperthyroidism & Graves' disease. - Hypothyroidism, Thyroiditis (Hashimoto's, deQuervain, subacute thyroiditis) - Neoplasms (adenomas VS carcinomas), Papillary, follicular, medullary, anaplastic carcinoma - Hypoparathyroidism, hyperparathyroidism, parathyroid adenoma.	2	Morphological changes related to different causes of hyperthyroidism , hypothyroidism and thyroid neoplasms	2

Week 3	- Pathology of adrenal gland: - Hyperadrenalism (Cushing syndrome, hyperaldosteronism). - Adrenal insufficiency (acute, chronic, Addison disease). - Adrenocortical neoplasms. - Pheochromacytoma and neuroblastoma. - Multiple endocrine neoplasia (MEN1 and MEN2) -	2		
Week 4	- pathological changes in diabetes - Morphological changes of pancreas	1		
Total hours	-	7		2

4. Microbiology

Endocrine unit	4 Confusion	Microbiology	Genetic and immunopathogenetic predisposition Of DM. .1summarize the immuno-genetics of DM***. .2differentiate between immune and non immune genetics of diabetes***. .3review the immuno-pathogenesis of DM**.

5. Pharmacology

Weeks	Objectives	Theory/hr
1	**Pharmacology of growth hormone agonists (GH, gonadotrophins), growth hormone and anatagonists:** **1. Direct & indirect actions.** **2. Therapeutic uses.** **3. Adverse effects & contraindications**	1

2	**Drugs which are used in the treatment of thyroid diseases:** **1. Describe synthesis, actions and clinical uses of thyroid hormones** **2. Describe how drugs can be used to treat hypothyroid and hyperthyroid states.** **3. Discuss the pharmacology of drugs used in the treatment of hypothyroid and hyperthyroid states.**	1
3	**Pharmacology of ACTH, gonadotrophin and oxytocin:** **1. Actions** **2. Therapeutic uses** **3. Adverse effects & contraindications**	1
4	**1. Classification, mode of action &S.E of antihyperglacaemic agents.** **2. Novel groups of antihyperglycamic medications (incretin-based therapies and SGLT2 inhibitors).** **3. Insulin preparations, duration of effect of each type, why insulin analogues were produced.**	2