



وزارة التعليم العالي والبحث العلمي
جهاز الإشراف والتفويض العلمي



جامعة وارث الانبياء (ع)
كلية الطب

استمارة وصف البرنامج الأكاديمي للمعاهد والكليات 2026-2027 المقرر الدراسي

نموذج وصف البرنامج الأكاديمي

اسم الجامعة:	جامعة وارث الأنبياء
الكلية/ المعهد:	كلية الطب — جامعة وارث الأنبياء (ع)
القسم العلمي:	كلية الطب
اسم البرنامج الأكاديمي أو المهني:	النظام التكاملي / الوحدة العاشرة (جهاز الغدد الصماء)
اسم الشهادة النهائية:	بكالوريوس في الطب و الجراحة
النظام الدراسي:	سنوي
تاريخ إعداد الوصف:	ايلول 2026
تاريخ ملء الملف:	20/9/2026

التوقيع:		التوقيع:	
اسم المعاون العلمي: ا.م.د. علي عبدالرضا الغرة		اسم رئيس القسم: م.د. محمد صالح مهدي	
التاريخ: 2026/09/26		التاريخ: 2026/09/26	

دقق الملف من قبل
شعبة ضمان الجودة والأداء الجامعي
اسم مدير شعبة ضمان الجودة والأداء الجامعي: م.د. أياد علي صاحب الموسوي

التاريخ:	٢٠٢٦ / ٩ / ٢٦
التوقيع:	Ayad

مصادقة السيد العميد
د. علي عبد الحليم
٢٠٢٦ / ٩ / ٢٦

نموذج وصف المقرر

1. اسم المقرر	
جهاز الغدد الصماء	
2. رمز المقرر	
Medu304	
3. الفصل / السنة	
الفصل الثاني	
4. تاريخ إعداد هذا الوصف	
20/9/2026	
5. أشكال الحضور المتاحة	
حضوري	
6. عدد الساعات الدراسية (الكلي) / عدد الوحدات (الكلي)	
49 ساعة نظري + 22 ساعة عملي / عدد الوحدات الكلي 4 وحدات	
7. اسم مسؤول المقرر الدراسي (إذا أكثر من اسم يُذكر)	
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8. أهداف المقرر
أهداف المادة الدراسية: بنهاية هذا المقرر الدراسي، سيكون طلاب السنة الثالثة قادرين على اكتساب واستيعاب المعارف الأساسية المتعلقة بالموضوعات الرئيسية لجهاز الغدد الصماء وأمراضه من منظور متعدد الجوانب؛ وذلك من خلال المحاضرات النظرية، والجلسات العملية، والحالات السريرية. وتشمل هذه الجوانب بشكل رئيسي: علم التشريح، وعلم الأنسجة، وعلم الأمراض، وعلم الأدوية، وعلم وظائف الأعضاء، وعلم الأحياء المجهرية، وعلم المناعة، وعلم الطفيليات، والكيمياء الحيوية، وطب المجتمع. وسيتم ربط هذه المحاور كافة بالحالات السريرية عبر جلسات أسبوعية مخصصة للتعليم القائم على حل المشكلات". (PBL)

9. استراتيجيات التعليم والتعلم

الاستراتيجية: كون الطلاب هم طلبة المرحلة الثالثة، يكون محور التعليم لديهم اكتساب كم وافر من العلوم الطبية الأساسية وربط هذه المعلومات بالحالات السريرية بالقدر الذي يمكنهم من الوصول الى معرفة اكبر عدد ممكن من جوانب امراض جهاز الغدد الصماء المختلفة وخاصة الشائعة منها لغرض تهيئتهم علميا واكاديميا للمراحل الدراسية المتقدمة في كلية الطب، عندها يكون الطلبة مستعدين للتعامل مع العلوم الطبية السريرية بصورة اكبر تدريجيا.

هذه الاستراتيجية المتبعة تفيد الطلبة لكي يتدرجوا في تعليمهم وتعلمهم لكي يدخلوا الحياة المهنية والتي تتعامل بصورة مباشرة مع حياة الانسان.

10. بنية المقرر

Week One / Total hours 17 hours	Learning Methods	Assessment Methods
	1. Theoretical lectures 2. Practical sessions 3. Clinical skills labs	1. Weekly exams 2. Unit's end exams 3. Assessing students according to their participation in weekly-held small group teaching
Unit or Topic Name	Required Learning Outcomes	
1. PBL case study	Being familiar with the main clinical features regarding Growth hormone deficiency diseases in a simple and basic way.	
2. Pathology	1. <u>Pathology of pituitary gland:</u> - Ischemic necrosis (Sheehan synd.) - Ablation (surgery, radiation), - Inflammation (Sarcoidosis, TB) - Trauma, metastasis - Non-functioning adenomas 2. <u>Diabetes insipidus & ADH.</u> 3. <u>Pituitary adenomas:</u> Histology and immunohistochemistry (IHC)	
3. Anatomy	<u>Morphology of pituitary gland</u> 1. Recognize different types of cells in the pituitary gland and list the hormones they produce. 2. Describe the osteology of Sella turcica. 3. Discuss the relations of the pituitary gland. 4. Describe gross and radiological anatomy of pituitary gl.	

	5. Describe the hypothalamic circulation. 6. Embryogenesis.
4. Physiology	<u>Endocrine system overview.</u> 1. Discuss the concept of the hormones 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 physiological relations between hypothalamus and pituitary glands and other target endocrine organs. <u>Physiology of growth hormone (GH):</u> 1. Describe GH secretion. 2. Explain regulatory mechanism of GH. 3. Describe physiological function of GH. 4. Describe signs and symptoms of GH secretion disorders. <u>Hormones overview:</u> 1. Discuss the chemical structures of hormones. 2. Mechanisms of signal transductions. 3. Identify different methods of hormonal measurements. <u>Growth hormone (GH):</u> 1. Describe the chemical structure of GH. 2. Describe the mode of action of GHRH. 3. Biochemical actions of GH. 4. Antagonism of GH to insulin. 5. GH production by recombinant DNA.
5. Biochemistry	<u>OUTCOME: knowing how to detect hyperprolactinaemia</u> 1 - Factors that regulate the release of anterior pituitary hormones 2 - Prolactin: • Secretion and function • Macroprolactin concept 3 - Hyperprolactinaemia • Causes of hyperprolactinaemia • Diagnosis (which causes should be excluded first and how detect persistent elevation of prolactin) 4-Degrees of hyperprolactinaemia in various clinical scenarios
6. Pharmacology	<i>Pharmacology of growth hormone agonists (GH, gonadotrophins), methionyl growth hormone and anatagonists:</i>

	1. Direct & indirect actions. 2. Therapeutic uses. 3. Adverse effects & contraindications.
7. Clinical Resources	<u>Clinical aspects of pituitary diseases:</u> 1. Presentation in hypopituitarism. 2. Prevalence of pituitary adenoma. 3. Functionless pituitary tumors (diagnosis & treatment). 4. Functioning pituitary tumors (Dx & treatment) 5. Follow up of pituitary tumors. 6. Diabetes insipidus.
8. Practical Labs	<i>Lab-1: - (anatomy) (2 hours)</i> <i>Lab-2: histology of the endocrine system lab. (2 hours)</i> <i>Lab-3: clinical skills lab. (2 hours)</i>

Week Two / Total hours 23hours	Learning Methods	Assessment Methods
	1. Theoretical lectures 2. Practical sessions 3. Clinical skills labs	1. Weekly exams 2. Unit's end exams 3. Assessing students according to their participation in weekly-held small group teaching
Unit or Topic Name	Required Learning Outcomes	
1. PBL case study	Being familiar with the main presentations of <i>Thyroid (Grave's disease)</i> with their main causative factors in a simple and basic way.	
2. Pathology	<u>Pathology of thyroid and parathyroid glands:</u> 1. Hyperthyroidism & Graves' disease. 2. Hypothyroidism, Thyroiditis (Hashimoto's, deQuervain, subacute thyroiditis) 3. Neoplasms (adenomas VS carcinomas), Papillary, follicular, medullary, anaplastic carcinoma 4. Hypoparathyroidism, hyperparathyroidism, parathyroid adenoma.	
3. Anatomy	<u>Anterior triangle of the neck:</u> 1. Cutaneous innervation of the neck. 2. Name major compartments and facial layers.	

	3. Describe viscera and clinical importance. 4. Describe subdivisions and borders of anterior triangle of the neck. 5. Lists the contents of muscular & carotid triangles of the neck. <u>Anatomy of thyroid and parathyroid glands:</u> 1. Describe the anatomical features of thyroid and parathyroid glands. 2. Embryogenesis and anomalies of glands. 3. Describe anatomical relations of thyroid gland & complications of thyroidectomy 4. Explain the anatomical aspects of exophthalmos in hyperthyroidism
4. Histology	- Histology of the Thyroid gland (Thyroid follicle and Thyroid C cell)
5. Physiology	<u>Peripheral actions of thyroid hormones:</u> 1. Identify the major classes of thyroid hormones. 2. Describe the cellular mechanisms of actions. 3. Describe the biological effects of thyroid hormones. 4. Discuss the effects of under and over secretion of thyroid hormones.
6. Biochemistry	<u>Thyroid hormones biosynthesis and mechanisms of action:</u> OUTCOME: knowing how to use TFTs to detect different types of thyroid disorders 1 - Thyroid hormone : -Synthesis and metabolism , Plasma transport and cellular action , Regulation of thyroid function 2 - Investigations to determine thyroid status: -what are the changes in the following tests in different types of thyroid disorders ,Thyrotrophin (causes of high and low) ,Free T4 and free T3 , Total T4 and total T3 , Interpretation of thyroid function tests in patients being investigated for suspected thyroid disease ,Categories of patients who should have thyroid function tests performed 3- Hyperthyroidism: - Concepts of (Overt primary, Subclinical, and Secondary hyperthyroidism) ,Interpretation of thyroid function tests in suspected hyperthyroidism 4- Hypothyroidism: - Concepts of (Overt primary, Subclinical primary, Secondary (central) hypothyroidism , Monitoring of HRT with TFTs

	, Interpretation of thyroid function tests in suspected hypothyroidism 5- Thyroid function testing in patients with nonthyroidal illness (NTI) 6- Thyroid hormone resistance (THR): - Types (generalized, pituitary, and peripheral) , Diagnosis (the importance to differentiate between TSHoma and THR, and which tests are required) 7- Causes of abnormal results for thyroid hormone measurements in euthyroid subjects 8- Miscellaneous tests and thyroid disease: the role of the following test to detect the type of thyroid disorders: TRH test ,Anti-thyroid peroxidase antibodies (TPOAbs), Thyrotrophin receptor antibodies (TRAbs) , Tests affected by changes in thyroid status
7-Pharmacology	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.
8-Community Medicine	-Endemic goiter - a- Epidemiology - b- Neonatal screening for congenital hypothyroidism - c- Control and prevention
9-Clinical Resources	<u>Clinical aspects of thyroid and parathyroid glands</u> Clinical aspects & management of: 1. Thyrotoxicosis ✓ Graves dis. ✓ Thyroiditis. ✓ Toxic MNG or adenoma ✓ Associated hyperemesis ✓ Nodular thyroid disease 2. Hypothyroidism 3. Hyperparathyroidism 4. Hypoparathyroidism.
10- Practical Labs	- Lab-1: pathology (2 hours) - Lab-2: anatomy (2 hours) - Lab-3: clinical skills lab (2 hours)

	- Lab 4: biochemistry (2 hours)
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Week Three / Total hours 15 hours	Learning Methods	Assessment Methods
	1. Theoretical lectures 2. Practical sessions 3. Clinical skills labs	1. Weekly exams 2. Unit's end exams 3. Assessing students according to their participation in weekly-held small group teaching
Unit or Topic Name	Required Learning Outcomes	
1. PBL case study	Being familiar with the main presentations of <i>Cushing's disease</i> and their main causative factors in a simple and basic way.	
2. Pathology	<u>Pathology of adrenal gland:</u> 1. Hyperadrenalism (Cushing syndrome, hyperaldosteronism). 2. Adrenal insufficiency (acute, chronic, Addison disease). 3. Adrenocortical neoplasms. 4. Pheochromocytoma and neuroblastoma. 5. Multiple endocrine neoplasia (MEN1 and MEN2)	
3. Anatomy	<u>Anatomy of adrenal gland:</u> 1. Describe the gross features of adrenal gland. 2. Describe Embryogenesis of adrenal gland	
4. Histology	1. Histology of the Adrenal Cortex (zona glomerulosa, zona fasciculate and zona fasciculate) 2. Histology of the adrenal medulla	
5. Physiology	<u>Biosynthesis of adrenocortical and medullary hormones:</u> <u>Regulation of adrenal steroid hormone synthesis and secretion (1h)</u> OUTCOME: knowing the metabolic effect of the adrenal cortex hormones 1- Synthesis and secretion of adrenal hormones 2- Glucocorticoid secretion: effects and transport of glucocorticoids 3 - Factors regulate ACTH secretion 4 - The hypothalamic–anterior pituitary–adrenal axis (overview)	

	5- Aldosterone secretion: the effects and control of aldosterone secretion 6- The renin–angiotensin system (overview) 7 - Androgen secretion: types and importance of adrenal androgens 8- Steroid biosynthetic pathways in the adrenal cortex (overview) <u>Adrenal gland function:</u> 1. Discuss the factors regulating the secretion of adrenocortical and medullary hormones. 2. Describe the common presenting signs of under and oversecretion of adrenal hormones. 3. Discuss the ways in which these signs are related to adrenal physiology.
6. Biochemistry	Investigation of suspected adrenocortical hyperfunction (2h) OUTCOME: knowing how to use the laboratory tests to diagnose adrenocortical hyperfunction 1- Hyperfunction of the adrenal cortex concept 2- Cushing's syndrome definition 3- Causes of glucocorticoid excess (ACTH dependent vs ACTH independent) 4- Tests used to establish if a clinical diagnosis of Cushing's syndrome is likely: how to do and interpret the following laboratory tests - a- Initial screening tests: ☐ Low-dose dexamethasone suppression test ☐ Urinary free cortisol (UFC) ☐ Late night salivary cortisol ☐ Interpretation of screening tests - b- Confirmatory tests: ☐ Loss of diurnal rhythm - c- Determining the cause of Cushing's syndrome: ☐ Plasma ACTH ☐ High-dose dexamethasone suppression test ☐ CRH stimulation test - d- Other biochemical tests (k+, GTT): how the adrenocortical hyperfunction could affect the different metabolites - Investigation of suspected adrenocortical insufficiency (1h) OUTCOME: knowing how to use the laboratory tests to diagnose adrenocortical Insufficiency

	1 - Classification, causes, and presentation patterns (primary vs secondary causes) 2-Diagnosis of primary adrenal insufficiency (Addison's disease): how to use the following tests to diagnose adrenocortical insufficiency: ☐ Cortisol and ACTH measurements ☐ Short tetracosactrin (Synacthen) test ☐ Further testing in confirmed adrenocortical insufficiency
7. Pharmacology	<u>Pharmacology of ACTH, gonadotrophin and oxytocin:</u> 1. Actions 2. Therapeutic uses 3. Adverse effects & contraindications
8. Clinical Resources	<u>Clinical aspects of adrenal diseases</u> 1. Disorders of adrenal gland. 2. Hypofunctioning gland 3. Hyperfunctioning gland 4. Carcinomas. 5. Genetic disorders <u>Cushing's syndrome</u> 1. Introduction. 2. Diagnosis 3. Psychological aspects
9. Practical Labs	- Lab 1: anatomy (2 hours) - Lab-2: clinical skills lab (2 hours)

Week Four / Total hours 16 hours	Learning Methods	Assessment Methods
	1. Theoretical lectures 2. Practical sessions 3. Clinical skills labs	1. Weekly exams 2. Unit's end exams 3. Assessing students according to their participation in weekly-held small group teaching
Unit or Topic Name	Required Learning Outcomes	
1. PBL case study	Being familiar with the main presentations of Diabetes with their main types and complications.	
2. Anatomy	Anatomical features of pancreas	
3. Histology	Histology of pancreas	

4. Community	1-Impact of diabetes as a public health problem (<u>epidemic</u>). 2. Epidemiology, risk factors of diabetes and screening of diabetes (risk score calculator). 3. Role of lifestyle interventions (diet and physical activity) in preventing diabetes with a focus on results of major trials e.g. (The Finnish Diabetes Prevention Study (DPS)).
5. Immunology	1. Genetic and immunopathogenetic predisposition of DM 2. Association with specific HLA complexes.
6-Physiology	1-pathophysiology of diabetes 2-mechanisms of hormone control and release of insulin 3-function of pancreas 4-function of insulin and glucagons in regulating blood sugar
7-Pathology	1- pathological changes in diabetes 2-Morphological changes of pancreas
8-Biochemistry	OUTCOME: knowing how to diagnose, monitor, and detect the metabolic complications of <u>DM - Classification of DM (primary vs secondary)</u> - Types (T1DM, T2DM) - <u>Diagnosis: how to use the following test to reach diagnosis</u> ☐ FBS and RBS ☐ HbA1c ☐ OGTT - Impaired fasting glucose (IFG) and impaired glucose tolerance (IGT) concepts - <u>Monitoring the treatment of diabetic patients: types and importance of monitoring strategies</u> ☐ Home blood glucose monitoring ☐ Glycated haemoglobin ☐ Glycated plasma proteins ☐ Microalbumin - <u>Metabolic complications of diabetes mellitus - Diabetic ketoacidosis (DKA):</u> ☐ Metabolic and clinical abnormalities in DKA ☐ Investigations and monitoring - <u>Hyperosmolar hyperglycaemic state (HHS)</u> ☐ Metabolic and clinical abnormalities in HHS ☐ Investigations - Hypoglycaemia: ☐ Diagnostic criteria ☐ Types and causes ☐ Investigations

9. Pharmacology	1. Classification, mode of action &S.E of antihyperglacaemic agents. 2. Novel groups of antihyperglycemic medications (incretin-based therapies and SGLT2 inhibitors). 3. Insulin preparations, duration of effect of each type, why insulin analogues were produced.
10. Clinical Resources	1. Types of diabetes and etiology of each type of diabetes 2. Clinical presentations and monitoring 3. Diagnosis and management of prediabetes 4. hyperosmolar hyperglycemic state
11. Practical Labs	Clinical Skills 1. Communicate clearly and take patient-centered full history from a patient with diabetes 2. Full examination of patient with diabetes 3. Outline management of patient with diabetes (medical and non-medical) 4. Identify complications of diabetes 5- The psychosocial aspects of diabetes Practical lab Biochemistry (Perform and interpret glucose tolerance test)

11. تقييم المقرر

يمكن تقييم المقررات الدراسية بطرق متعددة، منها: الاختبارات الأسبوعية المنتظمة المبنية على الفريق (TBL)، والأنشطة الطلابية القائمة على حل المشكلات (PBL)، بالإضافة إلى التغذية الراجعة الدورية المستلمة من الطلاب لتقييم المادة العلمية المطروحة وأعضاء الهيئة التدريسية المشاركين في العملية التعليمية، وبناءً على ذلك يمكن إجراء تعديلات طفيفة على المقرر".

12. مصادر التعلم والتدريس

Pathology:

1-Robbins and Cotran Pathologic basis of disease ,10th edition -, 2-KUMAR, ABBAS & ASTER.

Physiology

1. Guyton and Hall Textbook of Medical Physiology (Guyton Physiology) 13th Edition by John E.

الكتب المقررة المطلوبة (المنهجية أن وجدت)

2-Ganong's Review of Medical Physiology,
26th by Kim Barrett.

Radiology

- 1-Diagnostic imaging by peter Armstrong
- 2-Textbook of radiology and imaging by David
sutton

Radiopedia

Anatomy

- 1-Snell's clinical anatomy by regions, 8th edition
- 2-Gray's anatomy for medical students, 2nd
edition

Embryology

- 1-Medical s Langmann

Biochemistry

1. Textbook of Biochemistry for Medical
Students
2. Quick Review of Biochemistry for
Undergraduates: Questions and Answers
3. Clinical Biochemistry and Metabolic
Medicine

Immunology & Microbiology

- 1-Essential clinical Immunology,
JOHN B.Zabriskie
- 2-Kuby-Immunology-7th edition
- 3-Abbas AK and Lichtman Basic Immunology
- 4-world Journal of gastrointestinal
pathophysiology
- 5- Review of medical microbiology and
Immunology
6. Murray PR, Rosenthal KS, Pfaller MA.
Medical Microbiology. 10th ed. Elsevier; 2025.
7. Riedel S, Morse SA, Mietzner TA, Miller S.
*Jawetz, Melnick & Adelberg's Medical
Microbiology*. 29th ed. McGraw Hill; 2026.
8. Tille PM. *Bailey & Scott's Diagnostic
Microbiology*. 16th ed. Elsevier; 2025.

9. Levinson W, Chin-Hong P, Joyce EA, Nussbaum J, Schwartz B. *Review of Medical Microbiology and Immunology*. 15th ed. McGraw Hill.
10. Bennett JE, Dolin R, Blaser MJ, eds. *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases*. Elsevier.
11. Garcia LS. *Diagnostic Medical Parasitology*. ASM Press.
12. Larone DH. *Medically Important Fungi: A Guide to Identification*. ASM Press.
13. World Health Organization. *Laboratory Biosafety Manual*. 4th ed. WHO; 2020.
14. Clinical and Laboratory Standards Institute. *Performance Standards for Antimicrobial Susceptibility Testing (M100)*. CLSI.
15. European Committee on Antimicrobial Susceptibility Testing. *Breakpoint Tables for Interpretation of MICs and Zone Diameters*. EUCAST.

.	المراجع الرئيسية (المصادر)
علم الامراض Pathology: Ackerman surgical pathology, 10th edition, 2011, Juan Rosai. • Sternberg's diagnostic surgical pathology, 5th edition, 2010.	الكتب والمراجع الساندة التي يوصى بها (المجلات العلمية، التقارير)
علم الامراض Pathology: http://www.pathologyoutlines.com	المراجع الإلكترونية، مواقع الإنترنت

