



Academic Course Specification Form

استمارة توصيف المقرر الأكاديمي

القسم الخاص بالطالب Section Concerning the Student

1. Course Code:	BIOLS 438	1. رمز المقرر:
2. Course Title	Endocrinology	2. اسم المقرر:
3. College:	Science	3. الكلية:
4. Department:	Biology	4. القسم:
5. Academic Program:	Bachelor of Science in Biology	5. البرنامج الأكاديمي:
6. Course Credits:	2-2-3	6. عدد الساعات المعتمدة:
7. Course NQF Level:	8	7. مستوى المقرر وفقاً للإطار الوطني للمؤهلات:
8. Notional Hours:	127	8. عدد الساعات الافتراضية:
9. NQF Credits:	13	9. عدد الساعات المعتمدة للمقرر وفقاً للإطار الوطني للمؤهلات:
10. European Credit Transfer System (ECTS) credits	6.5	10. عدد الساعات للمقرر بالنظام الأوروبي
11. Prerequisite:	BIOLS 372	11. المتطلب السابق للمقرر:
12. Lectures Timing & Location:		12. وقت المحاضرة ومكانها:

13. General Mode of Teaching and Learning	Tranditional تقليدي	13. النمط العام للتعليم والتعلم:
14. Course Coordinator:		14. منسق المقرر:
15. Course Instructor:		15. مدرّس المقرر:
16. Office Hours and Location:		16. الساعات المكتبية ومكانها:
17. Instructor's Email:		17. البريد الإلكتروني لمدرّس المقرر:
18. Academic Year:		18. السنة الأكاديمية:
19. Semester:		19. الفصل الدراسي:
20. Textbook(s):	20. الكتب الدراسية للمقرر:	
Jameson, J., 2021. Harrison's Endocrinology, 4th Edition. McGraw-Hill Education.		
21. References:	21. المراجع:	
Any Endocrinology books available in library Recent Published literature reviews in Endocrinology		
22. Other Learning Resources Used (e.g. e-learning, field visits, periodicals, software, etc.):	22. مصادر التعلم الأخرى (مثل: التعلم الإلكتروني، زيارات ميدانية، دوريات، برمجيات، إلخ....)	
UOB official platforms (Microsoft Teams & Blackboard)		
23. Course Description (as published in the College Catalogue):	23. توصيف المقرر (حسب ما ورد في دليل الكلية):	
The structure of hormones; mechanism of their action; control of growth, maturation, reproduction, behavior and chemical homeostasis. Discussion covers hormones of the pancreatic islets; parathyroid glands, hypothalamus and pituitary glands, thyroid gland, adrenal gland and reproductive glands. Emphasis on the endocrine control of metabolism. Reference to major endocrine diseases will be made where necessary.		
24. Course Intended Learning Outcomes (3 to 5 CILOs):	24. مخرجات التعلم للمقرر (CILOs) (3 إلى 5 مخرجات تعليمية):	
1. Describe the anatomy and physiology of the endocrine system		
2. Identify the major hormones and their synthesis, release and functions in human body.		
3. Recognize the various factors related to major human endocrinological problems.		
4. Explain the mechanism of hormone regulation and feedback loops.		
5. Evaluate endocrine problems and concerns through writing and oral presentations.		

25. Course Assessment Percentages (as per Regulations of Study and Examination at the University of Bahrain):		25. أساليب التقييم ونسبها المئوية (بحسب نظام الدراسة والامتحانات في جامعة البحرين):	
Assessment التقييم	Type النوع	Percentage النسبة	Assessment Date تاريخ التقييم
Test 1	Individual فردي	12%	
Test 2	Individual فردي	12%	
Oral presentation	Pair ثنائي	6%	
Case study	Group جماعي	5%	
Lab Quiz 1	Individual فردي	5%	
Lab Quiz 2	Individual فردي	5%	
Final Lab Exam	Individual فردي	15	
Final Exam	Individual فردي	40	
Total	100%		
26. Description of Topics Covered		26. وصف الموضوعات التي ينبغي تناولها:	
Topic Title (e.g. chapter/experiment title) الموضوع		Description التفصيل	
Ch1: Introduction to Endocrinology		Brief introduction to endocrinology system, its functions, and common conditions and disorders of endocrinology system.	
Ch2: Hormonal Communication		Classification of hormones, chemical signaling mechanisms, hormone synthesis, secretion, transport, and regulation. Hormone receptors and signal transduction processes.	
Ch3: Pineal Gland		Pineal gland anatomy and structure, main functions of the pineal gland, melatonin synthesis and metabolism, melatonin's mechanisms of action, and melatonin physiology.	
Ch4: Hypothalamus		Anatomy of the hypothalamus, hypothalamus hormones, main functions of the hypothalamus (cardiovascular regulation, regulation of body temperature, regulation of body water, endocrine control, regulation of food intake, and behavioral control).	
Ch5: Pituitary Gland		Pituitary anatomy and structure, anterior pituitary hormones functions: growth hormone; prolactin; follicle-stimulating hormone; luteinizing hormone; thyroid-stimulating hormone, and	

	adrenocorticotrophic hormone functions. The posterior pituitary hormones functions: oxytocin and antidiuretic hormone (ADH) or vasopressin.			
Ch6: Thyroid Gland		Thyroid anatomy and structure, main functions of the thyroid gland, synthesis, secretion and regulation of thyroid hormones.		
Ch7: Parathyroid Gland		Parathyroid anatomy and structure, main function of the parathyroid gland, synthesis, secretion and regulation of parathyroid hormones. Role of parathyroid in regulating calcium levels in the body.		
Ch 8: Adrenal Gland		Adrenal anatomy and structure, main function of the adrenal gland, synthesis, secretion, and regulation of adrenal hormones. Role of the adrenal hormones in the body stress response and regulation of various metabolic processes.		
Ch 9: Pancreas		Pancreas anatomy and structure, main function of the pancreas gland, synthesis, secretion, and regulation of pancreas hormones. The role of pancreas hormones in maintaining glucose homeostasis.		
Ch10: Kidney Hormones		Kidney anatomy and structure, hormones secreted by kidney: erythropoietin, calcitriol thrombopoietin and rennin		
Ch11: Digestive System Hormones		Digestive system hormones, main functions of digestive hormone, leptin and ghrelin, and gut hormones in managing diabetes type 2 and obesity.		
Ch12: Sexual Reproductive Endocrinology		Gonads (ovaries and testes), definition, structure, hormones, and functions. The impact of sexual hormones on sexual development, puberty, menstrual cycle, behavior, and fertility.		
27. Weekly Schedule (Theory)		27. الجدول الأسبوعي		
Week الأسبوع	Date التاريخ	Topics Covered الموضوعات المتناولة	CILOs مخرجات التعلم للمقرر (CILOs)	Teaching/Assessment Mode and Method منهجية ونمط التدريس/التقييم
1	2/10/2025	Introduction to Endocrinology	1	Lectures & practical Test 1 Final Exam
2	2/17/2025	Hormonal Communication	1, 3, 4	lectures Test 1 Final Exam
3	2/24/2025	Pineal Gland	2, 3	lectures

		Pineal gland anatomy and structure, main functions of the pineal gland		Test 1 Final Exam
4	3/3/2025	Pineal Gland melatonin synthesis and metabolism, melatonin's mechanisms of action and physiology	2, 3	lectures Test 1 Final Exam
5	3/10/2025	Hypothalamus	2, 3, 4	lectures & Practical Test 1 Final Exam
6	3/17/2025	<i>Pituitary Gland</i>	2, 3, 4	lectures & Practical Test 2 Final Exam
7	3/24/2025	Thyroid Gland	2, 3, 4	lectures & Practical Test 2 Final Exam
8	4/2/2025	Parathyroid Gland	2,3,4	lectures & Practical Test 2 Final Exam
9	4/9/2025	Adrenal Gland	2,3,4	lectures & Practical Final Exam
10	4/16/2025	Pancreas	2, 3, 4	lectures & Practical Final Exam
11	4/22/2025	Kidney Hormones and Digestive system Hormones	2, 3	lectures & Practical Final Exam
12	4/29/2025	Sexual Reproductive Endocrinology in male	2,3,4	lectures & Practical Final Exam
13	5/5/2025	Sexual Reproductive Endocrinology in female	2, 3, 4	lectures & Practical Final Exam
14	5/7/2025	Assess endocrine problems and current advancements and emerging trends in endocrinology	5	Oral Presentation
15	5/12/2025	Assess endocrine problems and current advancements and emerging trends in endocrinology	5	Oral Presentation
16	5/14/2025	Assess endocrine problems and current advancements and emerging trends in endocrinology	5	Oral Presentation
Weekly Schedule (Lab)			الجدول الأسبوعي	
Week الأسبوع	Date التاريخ	Topics Covered الموضوعات المتناولة	CILOs	Teaching/Assessment Mode and Method

			مخرجات التعلم للمقرر (CILOs)	منهجية ونمط التدريس/التقييم
1	2/9/2025	No Lab		
2	2/16/2025	Endocrine System	1	Lecture Quiz 1
3	2/23/2025	Hormone Assessment Methods	1	Lecture Quiz 1
4	3/2/2025	Brain Gland Disorders (hypothalamus, pineal gland & pituitary gland)	2, 3 & 4	Lecture La Exam
5	3/9/2025	Thyroid Glands Disorders & Parathyroid Glands Disorders	2, 3 & 4	Lecture Lab Exam
6	3/16/2025	No Lab		
7	3/18/2025	Thymus and Adrenal Gland Disorders	2, 3 & 4	Lecture Lab Exam
8	3/25/2025	How to write case study	5	Case Study
9	4/6/2025	No Lab		
10	4/13/2025	Pancreas Disorders	2, 3 & 4	Lecture Lab Exam
11	4/20/2025	Reproductive Organs Endocrinopathies	2, 3 & 4	Lecture Quiz 2
12	4/27/2025	Case Study Presentation	5	Case Study
13	5/4/2025	Case Study Presentation	5	Case Study
14	5/11/2025	Final Lab Exam	2, 3 & 4	Final Exam
28. Academic Integrity Statement			28. بيان النزاهة الأكاديمية	
Students are to observe the highest level of honesty and academic ethics in pursuit of their academic goals as per UOB Regulations of Student Conduct and Academic Integrity, Anti-plagiarism Policies , and Students' Rights and Responsibilities Handbook . The consequences for cheating, plagiarism, unauthorized collaboration, and other forms of academic dishonesty can be very serious and will be dealt with as per the aforementioned policies and regulations.			يتعين على الطلبة الالتزام بأعلى مستويات الصدق والأمانة والأخلاقيات الأكاديمية في سعيهم لتحقيق أهدافهم الأكاديمية وفقاً للوائح سلوك الطلاب والنزاهة الأكاديمية، سياسات مكافحة الانتحال، ودليل حقوق الطلبة وواجباتهم، المعمول بها في جامعة البحرين. يمكن لعواقب الغش والسرقة الأدبية والتعاون غير المصرح به وغيرها من أشكال عدم الأمانة الأكاديمية أن تكون خطيرة للغاية وسيتم التعامل معها وفقاً للسياسات واللوائح المذكورة آنفاً.	
29. Attendance and Absence Regulations			29. نظام الحضور والغياب	
Students are required to adhere to regular attendance for class lectures and practical sessions, as determined by the nature of the course, as per Article (33) of Regulations of Study and Examination at the University of Bahrain .			يجب على الطلبة الالتزام بالحضور المنتظم للمحاضرات الصفية والعملية، حسبما تحدده طبيعة المقرر الدراسي، ووفقاً للمادة (33) من نظام الدراسة والامتحانات في جامعة البحرين .	

