



Academic Course Specification Form

استمارة توصيف المقرر الأكاديمي

القسم الخاص بالطالب Section Concerning the Student

1. Course Code:	BIOLS 340	1. رمز المقرر:
2. Course Title	General Ecology	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:	7	7. مستوى المقرر وفقاً للإطار الوطني للمؤهلات:
8. Notional Hours:	139	8. عدد الساعات الافتراضية:
9. NQF Credits:	14	9. عدد الساعات المعتمدة للمقرر وفقاً للإطار الوطني للمؤهلات:
10. European Credit Transfer System (ECTS) credits	7	10. عدد الساعات للمقرر بالنظام الأوروبي
11. Prerequisite:	BIOLS 103	11. المتطلب السابق للمقرر:
12. Lectures Timing & Location:		12. وقت المحاضرة ومكانها:

13. General Mode of Teaching and Learning	Traditional 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:	
Molles, M. (2018). Ecology: Concepts and Applications, 7th Edition, McGraw Hill. Smith R. L. & Smith T. M. (2021). Elements of Ecology. Person.		
21. References:	21. المراجع:	
Fundamentals of Ecology, Odum, E. Principles of Ecology, Putman, R. & Wratten, S.		
22. Other Learning Resources Used (e.g. e-learning, field visits, periodicals, software, etc.):	22. مصادر التعلم الأخرى (مثال: التعلم الإلكتروني، زيارات ميدانية، دوريات، برمجيات، إلخ....)	
Related journal articles will be reviewed during the course.		
23. Course Description (as published in the College Catalogue):	23. توصيف المقرر (حسب ما ورد في دليل الكلية):	
The study of the interrelationships and interactions of organisms and their environments. Topics include population dynamics, interspecific relationships, community structure and function, nutrient cycling, energy flow in ecosystems and ecological implications of climate change.		
24. Course Intended Learning Outcomes (3 to 5 CILOs):	24. مخرجات التعلم للمقرر (CILOs) (3 إلى 5 مخرجات تعليمية):	
1. Distinguish basic principles, and major concepts of ecology.		
2. Contrast major ecological processes and functions.		
3. Analyze the characteristics of population, community, and ecosystem.		
4. Perform effectively lab and field exercises and communicate the findings.		

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 فردى	20%	
Test 2	Individual فردى	20%	
Lab Assignments	Group جماعى	20%	
Final Exam	Individual فردى	40%	
Total	100%		
26. Description of Topics Covered		26. وصف الموضوعات التي ينبغي تناولها:	
Topic Title (e.g. chapter/experiment title) الموضوع		Description التفصيل	
What is Ecology		Definition of ecology and the subjects of ecology.	
Temperature Relations		Macroclimate interacts with the local landscape to produce microclimatic variation in temperature.	
Water Relations		The movement of water down concentration gradients in terrestrial and aquatic environments determines the availability of water to organisms.	
Population Distribution and Abundance		The physical environment limits the geographic distribution of species. On small scales, individuals within populations are distributed in patterns that may be random, regular, or clumped; on larger scales, individuals within a population are clumped.	
Species Abundance and Diversity		The lognormal Distribution. A combination of the number of species and their relative abundance defines species diversity	
Species Interactions and Community Structure		A food web summarizes the feeding relations in a community. Indirect interactions between species are fundamental to communities. The feeding activities of a few keystone species may control the structure of communities.	
Primary Production and Energy Flow		The interactions between organisms and their environments are fueled by complex fluxes and transformations of energy. Terrestrial primary production is generally limited by temperature and moisture. Studies on aquatic primary production have revealed a positive relationship between nutrient availability and rate of primary production in aquatic ecosystems.	

Nutrient Cycling and Retention			Use, transformation, movement, and reuse of nutrients in ecosystems; phosphorus, nitrogen, and carbon cycles.	
Succession and Stability			Community changes during succession include increases in species diversity and changes in species composition. Ecosystem changes during succession include increases in biomass, primary production, respiration, and nutrient retention.	
27. Weekly Schedule			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		Chapter 1: Introduction to Ecology Chapter 5: Temperature Relations	1	تقليدي Traditional
2		Chapter 5: Temperature Relations LAB: Overview of the lab sessions, Safety, Risk assessment	1, 3	تقليدي Traditional
3		Chapter 6: Water Relations LAB: Scientific method, report, presentation, plagiarism	1, 3	تقليدي Traditional
4		Chapter 6: Water Relations LAB: Geomorphology Bahrain	1, 3	تقليدي Traditional
5		Chapter 9: Population Distribution and Abundance LAB: Terrestrial and marine habitats of Bahrain	2, 3	تقليدي Traditional
6		Chapter 9: Population Distribution and Abundance	2, 3	تقليدي Traditional

		LAB: Sampling Design and sampling strategies in ecological Studies		
7		Chapter 16: Species Abundance and Diversity LAB: Quadrat: population estimation	2, 4	Traditional تقليدي
8		Chapter 16: Species Abundance and Diversity LAB: Quadrat: species importance	2, 4	Traditional تقليدي
9		Chapter 17: Species Interactions and Community Structure LAB: Disturbance and species diversity	2, 4	Traditional تقليدي
10		Chapter 17: Species Interactions and Community Structure LAB: Sediment analysis (Chemical factors)	2, 4	Traditional تقليدي
11		Chapter 18: Primary Production and Energy Flow LAB: Sediment analysis (Physical factors)	2, 3, 4	Traditional تقليدي
12		Chapter 18: Primary Production and Energy Flow LAB: Seagrass in Bahrain (productivity)	2, 3, 4	Traditional تقليدي
13		Chapter 19: Nutrient Cycling and Retention LAB: LAB: Seagrass in Bahrain (nursery)	2, 3, 4	Traditional تقليدي
14		Chapter 19: Nutrient Cycling and Retention	2, 3, 4	Traditional تقليدي

		LAB: Keystone species		
15		Chapter 20: Succession and Stability LAB: Food web	2, 3, 4	تقليدي Traditional
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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 والأخلاق 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 .	