

نموذج توصيف مقرر
Course Description Form

Name of College\Faculty : Science

اسم الكلية:

Name of Department: Biological Science

اسم القسم العلمي:

Course Name	Ecology علم البيئة	اسم المقرر
Course No.	306 - (0493)	رقم المقرر
No. of Credits	3	عدد الوحدات
Theoretical Hours	2	عدد الساعات النظرية
Practical Hours	1	عدد الساعات المحلّية
Course topics		مواضيع المقرر

Theoretical:

1. Introduction & the Importance of Ecology
2. The Physical Environment
3. Organismal Ecology
4. Population Ecology
5. Community Ecology
6. Ecosystem Ecology
7. Biogeographical Ecology

Practical:

1. Introduction, scientific methods, and formatting of laboratory reports
2. Meteorological parameter devices and climatic measurements
3. Mechanical and chemical soil analyses, & analysis of soil communities
4. Effects of oil pollution on ecosystems, "Nutrient Pollution" virtual (computer) lab
5. Population dynamics, "Isle Royale" virtual (computer) lab
6. Oxygen, pH, RH, conductivity, temperature, and primary production of oceans
7. Ecological energetics, "Trophic Cascades" virtual (computer) lab
8. "Evolution for Ecology" & "Niche Wars" virtual (computer) labs
9. Preparation for the aquatic & terrestrial ecosystem field trips
10. Analysis of the aquatic & terrestrial ecosystem field trip data
11. Hermit crab shell preference behavior

Text book: (Name, Author , Year , Publisher)	عنوان الكتاب : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
Elements of Ecology, Latest Ed. by Thomas Smith and Robert Smith	
References: (Name , Author , Year . Publisher)	عنوان المرجع : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)

Prerequisites 0493 - 205 + (0493 - 201 <i>or</i> 0493-206) لدفعة 2018 وما بعد فقط				متطلبات المقرر	
Grading	Exams	30	%		الاختبارات
	Quizzes	0	%		امتحانات قصيرة
	H.W.	0	%		واجبات
	Lab work	30	%		مختبرات
	Final	40	%		الاختبار النهائي
	%				آلية رصد المقرر

Course objectives					
No.	Course Objectives (Learning Outcomes)	Example(s) of relevant (Topics and activities)	Recommended Level to satisfy the objectives		
			High	Medium	Low
1	Develop a better understanding of ecological theory and methods.	Introduction & the Importance of Ecology. The Physical Environment.			✓
2	Judge the importance of ecological issues.	Organismal Ecology.		✓	
3	Assess what causes variation in climate and weather.	Population Ecology.	✓		
4	Compare and contrast animal and plant adaptations to different biomes and situations.	Ecosystem Ecology.	✓		
5	Describe population dynamics, species	Ecosystem Ecology.	✓		



	interactions, and trophic structure.				
Fields					
Skills					
Coordinator (Name and Rank) :	Bader Alhajeri (Full Professor)				
Signature and stamp :					
Date:	9\ 11 \2025				