

نموذج توصيف مقرر
Course Description Form

Name of College\Faculty : Science
Name of Department: Department of Biological Sciences

اسم الكلية:
اسم القسم العلمي:

Course Name	Vegetation ecology	اسم المقرر
Course No.	0494-464	رقم المقرر
No. of Credits	3	عدد الوحدات
Theoretical Hours	2	عدد الساعات النظرية
Practical Hours	3	عدد الساعات المحلية
Course topics		مواضيع المقرر
Text book: (Name, Author , Year , Publisher)		عنوان الكتاب : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
This course briefly introduces students to many aspects of vegetation cover and the effects of edaphic, abiotic, and biotic factors in vegetation cover distribution. Students will learn methods of species quantification and sampling methods from low- and high-vegetation-density ecosystems. The interspecific factors that influence species existence and interaction (with one another and with their changing environments) will be discussed so that students gain advanced knowledge on Ecosystem Monitoring Strategies and how to establish Risk Assessment Reports (RAR) together with Ecosystem Rehabilitation Strategies (ERS). The importance of seed banks and remote sensing in vegetation ecology will also be addressed in the context of establishing high-density ecosystems and generating vegetation maps, respectively.		
References: (Name , Author , Year . Publisher)		عنوان المرجع : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)
Ambasht, R. S., & Ambasht, N. K. (2023). A Textbook of Plant Ecology (16th ed.). CBS Publishers & Distributors. ISBN: 978-9354662645. Barbour, M. G., Burk, J. H., Pitts, W. D., Gilliam, F. S., & Schwartz, M. W. (1999). Terrestrial Plant Ecology (3rd ed.). Menlo Park, CA: Benjamin/Cummings Publishing Co. ISBN: 978-0-8053-0004-8. Keddy, P. A. (2017). Plant Ecology: Origins, Processes, Consequences (2nd ed.). Cambridge University Press. ISBN: 978-1-107-11423-4.		

Prerequisites						متطلبات المقرر
Grading	Exams		16 %		الاختبارات	آلية رصد المقرر
	Quizzes		6 %		امتحانات قصيرة	
	H.W.		8 %		واجبات	
	Project (field study)		30 %		مشاريع (دراسة ميدانية)	
	Final		40 %		الاختبار النهائي	
	100 %					

أهداف مخرجات المقرر :					
الرقم	أهداف مخرجات المقرر :			المستوى المطلوب من عضو هيئة التدريس لتحقيق الهدف :	
	أمثله من المقرر لتحقيق هذه الأهداف			عالي	متوسط
1					
2					
3					
4					
5					
					الحقول
					المهارات
					منسق المقرر (اسم عضو هيئة التدريس المشرف على توصيف المقرر ، توقيعه ، الختم و الرتبة الأكاديمية)
					تاريخ إعداد النموذج
					/ /

Course objectives					
No.	Course Objectives (Learning Outcomes)	Example(s) of relevant (Topics and activities)	Recommended Level to satisfy the objectives		
			High	Medium	Low
1	Understand fundamental principles of vegetation ecology and ecosystem concepts.	Topics: Introduction to vegetation ecology, habitats, ecosystems. Activities: Class discussions, guided reading, short quizzes.			X
2	Explain population and community dynamics, species interactions, and ecological niches.	Topics: Populations, communities, ecological niches, ecological equivalents, competitive		X	



		interactions. Activities: Field observations, case studies, group exercises.			
3	Analyze energy transfer, trophic interactions, and nutrient cycling in ecosystems.	Topics: Trophic structure, energy flow, carbon and nitrogen cycles, mineral cycling. Activities: Lab experiments, nutrient flux calculations, problem-solving exercises.	X		
4	Evaluate species roles, succession patterns, and vegetation dynamics in open ecosystems.	Topics: Species of ecological importance, ecological succession, climax communities, ecotypes/ecads. Activities: Field surveys, passport studies, succession modeling, statistical analysis of vegetation data.	X		
5	Apply quantitative, spatial, and modern tools to monitor, map, and manage vegetation and ecosystems effectively.	Topics: Soil properties, remote sensing, GIS vegetation mapping, seed banks, restoration strategies. Activities: Soil sampling and analysis, GIS and remote sensing and data interpretation, ecosystem rehabilitation planning.	X		
Fields	Plant and desert ecology, soil and ecosystem science, conservation, restoration, and remote sensing/GIS applications.				
Skills	Field sampling, species identification, community analysis, data interpretation, soil assessment, vegetation mapping, and ecosystem monitoring.				
Coordinator (Name and Rank) :	Dr. Naemah Al-Mansour				
Signature and stamp :					
Date:	12 \ 11 \ 2025				