جامعة المجمعة
Majmaah University

وكالة الجامعة للشؤون التعليمية
إدارة البرامج الدراسية والتطوير

نموذج (5)

مختصر توصيف مقرر

بيئة وتكيفات النبات

(Course Syllabus)

Plant Ecology

اسم المقرر:	بيئة وتكيفات النبات
رقم المقرر:	BIOL-344
اسم ورقم المتطلب السابق:	وظائف أعضاء نبات BIOL-223
اسم ورقم المتطلب المرافق:	-
مستوى المقرر:	الخامس
الساعات المعتمدة:	3

Course Information:

Module Title:	Plant Ecology
Module ID:	BIOL-344
Prerequisite (Co-requisite) :	Plant Physiology, BIOL-223
Co-requisite :	-
Course Level:	5th
Credit Hours:	3

معلومات المقرر:

Module Description:

This course deals with the environmental factors affecting the diversity and spread of plants and learn about the science of self-environment and science of mixed environment and the importance of the relationship between the plant environment and basic science and other science and identify the appropriate environments for different types of plant of vegetative cover groups and environmental factors that affect the growth and stability plant cover, which include all of the topographic factors and climatic factors, and biological factors and soil factors and determine the various environmental groups of moderation and salt and dryness and the most important plant characteristics which are characterized by their adaptation .

Module Aims:

1	Definition of the genesis and history of biology
2	The most important aspects of living organisms and the lives of these objects, installation and types of properties
3	The study plant and animal tissue (structure -function - biodiversity)
4	The study of the principles of division and classification (viruses- bacteria- fungi - algae- botany - zoology)
5	To be Knows the various biological processes that occur in living organisms and its relationship to other science
6	To be knows a Mendel's laws and know the genes and types of cell divisions in the cells, nutrition and metabolism and affairs of bioenergy , construction of

	biological energy, installed solar system and the construction of large storage biomolecules energy-analysis of biomolecules

Learning Outcomes:

1	Study Introduction and Plant Ecology definition
2	Study the concept of species and individuals, and the dynamic nature of the environment and environmental concepts and doctrines of the division of environmental systems
3	The study of the atmosphere and its components, and its properties and qualitative characteristics and quantity of plant communities
4	Give examples of plant communities within the KSA, affecting plants and environmental factors such as soil and climate factors and the location and vital factors and competition
5	Know the importance of water and plant adaptation to environmental factors and the desert and aquatic environments and moderation
6	Definition of the importance of coastal environments and seasonal manifestations and phases of vegetative growth and study environmental changes oscillatory and directed, and the concept of ecological balance and environmental applications

Course Contents:

(Subjects)	(Hours)	(Weeks)
Introduction and definition of plant ecology	**3**	**1**
Study the concept of species and individuals, and the dynamic nature of the environment	**3**	**1**
Environmental concepts and doctrines of the division of environmental systems	**3**	**1**
Qualitative characteristics and quantity of plant communities	**3**	**1**
Environmental factors affecting the plants (soil factors - climate factors – location factors - vital factors and competitive factors)	**3**	**2**
The importance of water and vegetation to adapt to environmental factors	**6**	**2**
The importance of coastal environments	**3**	**1**

Seasonal manifestations and phases of vegetative growth	**3**	**1**
Environmental changes and directed oscillatory	**3**	**1**
The concept of ecological balance and environmental applications	**3**	**2**

Textbook and References:

ISBN	Publishing Year	Publisher	Author's Name	Textbook title
978-0198757375	2016	Oxford University Press; 1st edition	Eric Garnier , Marie-Laure Navas and Karl Grigulis	Plant Functional Diversity: Organism traits, community structure, and ecosystem properties 1st Edition
	Publishing Year	Publisher	Author's Name	Reference
978-0199660810	2016	Oxford University Press; 1st edition	Ahmad Hegazy and Jon Lovett-Doust	Plant Ecology in the Middle East 1st Edition
978-1682861080	2016	Syrawood Publishing House	Clive Koelling	Functional Plant Ecology