



وكالة الجامعة للشؤون التعليمية
البرامج الدراسية والتطوير

(5)

مختصر توصيف

تصنيف

(Course Syllabus)

Plant Taxonomy

تصنيف نبات	:
BIOL-222	:
التشريح والشكل الظاهري للنبات BIOL-121	:
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3	:

Course Information:

Module Title:	Plant Taxonomy
Module ID:	BIOL-222
Prerequisite (Co-requisite):	Plant anatomy & morphology, BIOL-121
Co-requisite:	-
Course Level:	2 nd
Credit Hours:	3

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Module Description:

This course deals with the basic and contemporary systematic principles and methods as applied to vascular plants. Classification, identification, phylogenetic, and surveys of important families representing major groups of flowering plants.

Module Aims:

1	describe a plant, using the descriptive terminology of plant morphology, and some aspects of anatomy, embryology, palynology, and reproductive biology.
2	name, classify, and diagnose several of the major families of flowering plants.
3	know how to use an herbarium and to access herbarium databases.
4	state the principles and rules of plant nomenclature, including how to publish a new taxon name, and know how to use and apply botanical names.
5	Study the history of the concept of taxonomic classification and characteristics and sources of these qualities (old - contemporary - evolutionary – Chemical)
6	Taxonomic traits sources (stem - leaves - flower)
3	Types of inflorescences and fruits,
4	Taxonomic units (Class - Platoon - sex - Type)
5	Taxonomic study of virtual attributes and how to plant classification
6	Study taxonomic units and label
7	A study of some important plant species in the KSA and lawns and Botanical

	garden
8	The study of flora in general and flora of Saudi Arabia in particular

Learning Outcomes:

1	The student can be describing a plant using botanical terms.
2	Identify a plant using the key mechanics based on sources taxonomic traits such as stem, leaves and flower
3	Demonstrate knowledge in naming and publishing a new species
4	Recognize large and common families of flowering, inflorescences and fruits plants
5	Describe plant relationships depicted on phylogenetic trees with proper terms
6	Demonstrate knowledge in the current understanding of angiosperm phylogeny and evolution.
7	Learn how to determine the taxonomic units from Latin to the platoon and sex and gender and the use of scientific and taxonomic label keys
8	Recognize the different types of seeds and its germination.

Course Contents:

(Subjects)	(Hours)	(Weeks)
History and development of plant taxonomy and terminology	3	1
Classification, identification and botanical nomenclature (systematic of classification - method of identification - using and Making dichotomous key - rule of botanical nomenclature - botanical literature)	3	1
Observing & describing variation in vegetative morphology using botanical terms	3	1
Dissecting flowers & describing floral forms and structures using terms, floral formula, & diagram	3	1
Identification & understanding inflorescence and fruit types.	3	1
Identification of fruit types	3	1
Principles of Cladistics	3	1

Characteristics of ANITA Grade Families	3	1
Characteristics of Magnoliid Families	3	1
Characteristics of Monocot Families	3	1
Characteristics of Basal Eudicot Families	3	1
Characteristics of Rosid Families	3	1
Characteristics of Asterid Families	3	1
Observing and comparing plant materials from all families.	3	1

Textbook and References:

ISBN	Publishing Year	Publisher	Author's Name	Textbook title
0964022168	2010	Spring Lake Pub., Spring Lake UT	Harris, J.G. and M.W. Harris	Plant identification terminology: an illustrated glossary, 2nd edition
	Publishing Year	Publisher	Author's Name	Reference
	2008	Cambridge University Press, Cambridge	Mabberley, D. J.	The Plant Book: A Portable Dictionary of the Higher Plants. Third edition.
	2010		Allred, K.W. and R.D. Ivey.	Flora Neomexicana III: An Illustrated Identification Manual
	2008	S.Chance & Comp. LTD	B.P.Pandy	Modern practical botany

