



Course Specification

(Bachelor)

Course Title: Medicinal and economical plants

Course Code: BIOL_425

Program: Bachelor of Science

Department: Biology

College: College of Science

Institution: Majmaah University

Version: 4th

Last Revision Date: 26 December 2023



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A. General information about the course:

1. Course Identification

1. Credit hours: (2)

Equivalent to ECTS Credit point: 3

2. Course type

A. University College Department Track Others

B. Required Elective

3. Level/year at which this course is offered: (level 7)

4. Course General Description:

This course deals with the studying of economic plants and industrial and economic importance of these associated plants and identify plants that contain chemicals and natural and medical significance of some plants in KSA and the importance of these plants in the life of the vehicles man and in the industry and study of natural chemical compounds in the aromatic plants and how to draw each of these compounds from natural chemical plants, as well as how to keep them from being damaged

5. Pre-requirements for this course (if any):

6. Co-requisites for this course (if any):

7. Course Main Objective(s):

The main objective of this course is to build a comprehensive understanding of medicinal plants by describing their key characteristics, natural habitats, and preferred growing conditions, enabling learners to recognize where each plant is typically found. It also aims to develop the ability to accurately identify the most common and beneficial medicinal plants through their botanical features, and to provide clear guidance on how each plant can be safely and effectively used to support health and overall wellbeing.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	30	83.3
2	E-learning	6	16.7
3	Hybrid <ul style="list-style-type: none"> • Traditional classroom • E-learning 		





No	Mode of Instruction	Contact Hours	Percentage
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	0
3.	Field	0
4.	Tutorial	0
5.	Others (specify)	0
Total		30

Workload (based on academic semester)

No	Activity	Contact Hours
1.	Contact hours	30
2.	Self –study hours or Academic learning hours (Assignments, quizzes, reports, discussions, library , research....)	30
Total Workload		60
Equivalent to ECTS Credit Pionts		3

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	identify major medicinal and economically important plants using key botanical characteristics, morphological features, and field-based observation skills.	K3	Lecture, Videos, Group discussion, online course on future X (the national elearning platform)	Midterm 1 Midterm 2 Quiz Final exam
2.0	Skills			
2.1	Demonstrate an understanding of the ecological and geographical distribution of these plants, explaining	S1	Lectures, Videos, Group discussion, Brain storming, Critical thinking	Midterm 1 Midterm 2 Final exam





Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
	how environmental factors influence their growth, availability, and cultivation potential.			
3.0	Values, autonomy, and responsibility			
3.1	Students will analyze and explain the medicinal, nutritional, and commercial uses of selected plants, including their active constituents, traditional applications, and economic significance in local and global markets.	V1	Homework, and group discussion	Assignments, Homework, Presentation, Rubrics of behavior and performance in the lab.
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to medical plants	4
2.	Importance of plants and plant products Role of plant in enhancing the national economy	4
3.	Woods, wood products and paper products	4
4.	Rubber, latex, gums and resins	4
5.	Fibers, dyes and Tannins	4
6.	Oils and waxes	4
7.	Herbs, spices, essential oils, perfumes and fragrances	2
8.	Natural Plant Products : Plant Materials in Everyday Life	4
	Total Theory	30
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz-1	4 th Week	5
2.	Mid-term exam-1	6 th Week	15





No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
3.	Mid-term exam-2	8 th Week	15
4.	Quiz 2	9 th Week	5
5.	E-Exam-2	10 th Week	10
6.	Homework, Assignment, Presentation,	12 th Week	10
7.	Final exam	15 th Week	40

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	A guide to medical plants, An illustrated, scientific and medical approach, world scientific publishing Co Pte. I. td. Ling KH, Kian CT and Hoon TC Economic Botany: A Comprehensive Study 5th Edition. S. L. Kochhar. Cambridge University Press; 5 edition. 2016. 978-1107112940
Supportive References	Economic Botany: A Comprehensive Study 5th Edition. S. L. Kochhar. Cambridge University Press; 5 edition. 2016. 978-1107112940
Electronic Materials	Medicinal Plants List (wildernesscollege.com) Most Powerful Medicinal Plants and Herbs, Backed by Science (healthline.com)
Other Learning Materials	Electronic materials of Lecture notes and PowerPoints available in 'Black board' database

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom
Technology equipment (projector, smart board, software)	Smart board and e podium available
Other equipment (depending on the nature of the specialty)	Library and seminar room Wi-Fi internet connections

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Direct assessment
Effectiveness of	Program Leader	Direct assessment





Assessment Areas/Issues	Assessor	Assessment Methods
Students assessment		
Quality of learning resources	Students	Indirect assessment
The extent to which CLOs have been achieved	Faculty	Direct assessment
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	DEPARTMENT COUNCIL
REFERENCE NO.	#7
DATE	07/10/2024

