UNIVERSITY OF CALICUT

Programme	B. Sc. BOTANY				
Course Title	**Plants in Everyday Life**				
Type of Course	**MDC**				
Semester	**II**				
Academic Level	100-199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours
	3	3	-		45
Pre -requisites	-				
Course Summary	This course is designed to give an overview of how plants are indispensable to humans. It gives a broad exposure to the various aspects of plant resources & its utilization.				

Course Outcomes (CO): After completing the Course, the student should be able to:

COs	Statement	Cognitive level*	Knowledge Category#	Evaluation Tools
CO1	Recall various economically and medicinally important plant species used in day-to-day life	R	F	Quiz/Exam
CO2	Explain the uses of economically important plants and illustrate the processing of various plant parts.	U	C	Written Assignments, Lab exam/ Quiz
CO3	Analyse the utilization of various plant resources in day-to-day life.	An	C	Discussion/Presentation
CO4	Apply theoretical knowledge in utilization, and report generation of economical and medicinal plants.	Ap	C & P	Project reports/ collaborative report writing
CO5	Evaluate the quality and content of products used in everyday life	E	P	Analytical reports

* - Remember (R), Understand (U), Apply (Ap), Analyse (An), Evaluate (E), Create (C)
\# - Factual Knowledge(F) Conceptual Knowledge (C) Procedural Knowledge (P) Metacognitive Knowledge (M)

Detailed Syllabus

Module	Unit	Content	Hrs (36+9)
I		**Role of plants**	**9**
	1	Introduction to Plant resources.	1
	2	Role of plants: Air purifier (photosynthesis); plants used in	2

		rituals/festivals; nutrient source (litter manure, organic manure).	
	3	Pollution removal (phytoremediation and its types), pollution indicator (lichens).	2
	4	Common medicinal plants around us: Tulsi, *Adhatoda*, *Phyllanthus*, *Aloe*, *Andrographis*, *Eclipta*, *Coleus aromaticus* (Botanical source, part of the plant used, and medicinal uses).	3
	5	Plants as biofertilizers – *Azolla* (method of cultivation) *Gliricidia* - Uses and benefits.	1
II	**Plant resources and utilization-I**		**9**
	5	Brief description of plants, parts used and uses. Cereals: Rice, Wheat Millets: Ragi, Jowar	2
	6	Legumes: Bengal gram, Green gram, Black gram Edible oils: Sesame, Coconut	2
	7	Cash crops: Cashew, Cocoa	1
	8	Starch and tuber crops: Tapioca, Sweet potato and Yam	2
	9	Vegetable crops: Red amaranth, Lady's finger	2
III	**Plant resources and utilization-II**		**9**
	10	Spices: Clove, Black pepper, Cardamom Beverages: Tea and Coffee (including processing).	2
	11	Oils: Eucalyptus, Clove, Rose and Rosemary	2
	12	Fibres: Coir, Cotton, Jute, Banana and Sisal (Methods of separation of fibre, drying and processing of any two)	4
	13	Timber: Teak, Rose wood	1
IV	**Eco-friendly products from plants**		**9**
	14	Eco friendly alternatives-Introduction and scope	1
	15	Compostable garbage bags and Tableware: Example and preparation method	2
	16	Natural cleaning products and disinfectants: (One example for each and its preparation)	2
	17	Natural fabric dye, hair dye and hair and face wash, face pack, creams and gel	4
	18	Shampoo, Conditioner - (One example for each and its preparation)	
	19	Benefits of eco-friendly lifestyle	1
V	**Open ended (Suggestive list)**		**9**
	1. Field visit in the campus to identify useful plants 2. Report on eco-friendly products used in your area 3. Demonstration on preparation of various plant-based products		

Suggested Readings

- Billings S. and Collingwood S. 2013. The Big book of home remedies. Lulu.com publisher.
- Buckley, C. 2020. Plant Magic: Herbalism in Real Life. Roost Books Publishers,

New York.

- Chrispeels, M. J. and Sadava, D. E. 1994. Plants, Genes and Agriculture. Jones & Bartlett Publishers.
- Fuller, K.W. and Gallon, J. A. 1985. Plant Products and New Technology. Clarendon Press, Oxford, New York.
- Hill, A. F. 1952. Economic Botany: A Textbook of Useful Plants and Plant Products. McGraw Hill Publishing Company Ltd., New Delhi.
- Kochhar, S. L. 2012. Economic Botany in the Tropics. MacMillan India Ltd., New Delhi.
- Purohit, S. S. and Vyas, S. P. 2008. Medicinal Plant Cultivation: A Scientific Approach. Agrobios, India.
- Rao, R. S. 1985) Everyday Ayurveda: The complete book of Ayurvedic home remedies. Notion Press, India.
- Sambamurty and Subramanyam N. S. 1989. A Textbook of Economic Botany. Wiley Eastern Ltd., New Delhi.
- Sen, S. 2009. Economic Botany. NCBA Publishers, New Delhi.
- Sharma, O. P. 1996. Economic Botany. Tata McGraw Hill Publishing Company Ltd., New Delhi.
- Simpson B. B. and Conner-Ogorzaly M. 1986. Economic Botany - Plants in Our World. McGraw Hill, New York.
- Singh V, Pande P. C. and Jain D. K. 2009. A Text Book of Economic Botany. Rastogi Publications, Uttar Pradesh.
- Trivedi, P. C. 2006. Medicinal Plants: Ethnobotanical Approach. Agrobios, India.
- Upadhyay, R. 2023. Economic Botany: Principles & Practices. Kluwer Academic Publishers, The Netherlands.

Assessment Rubrics:

- Quiz / Exam/Discussion
- Assignment/ presentation/Project
- Project/Practical
- Final Exam

Mapping of COs to Assessment Rubrics :

	Quiz/ discussion	Presentation/ Assignment/Project	Theory/Practical Internal exam	End Semester Examinations
CO 1	✓			✓
CO 2	✓		✓	✓
CO 3	✓	✓		
CO 4		✓		✓
CO 5		✓		