



## University of Kerala

Discipline	<b>BOTANY</b>				
Course Code	<b>UK3DSEBOT202</b>				
Course Title	<b>FORESTRY</b>				
Type of Course	<b>DSE</b>				
Semester	<b>III</b>				
Academic Level	<b>200-299</b>				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	04	04 Hours	-	-	04 Hours
Pre-requisites	No Pre-requisites				
Course Summary	The course provides an overview of forestry, such as forest ecology, management practices, conservation, sustainable development and agroforestry. The students will gain an understanding of the principles and practices of forestry and their role in environmental conservation and resource management				

### Detailed Syllabus:

Module	Unit	Content	Hrs
<b>I</b>	<b>Introduction</b>		<b>15</b>
	1	General introduction, definition and scope of forestry	
	2	Types of Forest- Natural and Manmade	
	3	Classification of forest- Tropical, temperate, evergreen semi-evergreen, deciduous. <b>Learning Activity:-</b> 1. Field trips should be organized to different forest types 2. Hands-on training on navigation and map reading 3. Identification of forest Trees by Seeds / Bark (10 trees) 4. Examination of Microscopic Features of Wood 5. Analysis of Forest Vegetation- Density, Frequency and Abundance 6. Preparation of seedlings of forest tree species and planting.	
	4	Deforestation, reforestation and Afforestation	
<b>II</b>	<b>Forest Management</b>		<b>12</b>
	5	Silviculture- concept and scope of study - natural and artificial regeneration of forests- Monoculture, multipurpose.	
	6	Clear felling, uniform shelter, wood selection, coppice and conservation systems.	
	7	Silviculture practices (Brief outline only) of some of the economically important species in India such as, <i>Tectona grandis</i> , <i>Eucalyptus indica</i> , <i>Swietenia mahagoni</i> , <i>Dalbergia sisso</i> , <i>Santalum album</i> .	

<b>III</b>	<b>Forestry practices</b>		<b>08</b>
	8	Social and agroforestry. Selection of species and role of multipurpose trees. Food, fodder and energy.	
	9	Farm forestry, urban forestry, joint forest management - concepts, objectives and programmes. Avenue plantation.	
	10	Sacred groves- conservation and importance	
<b>IV</b>	<b>Forest Economics and Valuation</b>		<b>10</b>
	11	Forest resources and utilization. Forest products- timber, pulp wood, secondary timbers. Non timber forest products (NTFPs)-Gums, resins, fibers, oil seeds, nuts, rubber, canes and bamboos, medicinal plants, charcoal. Lac collection and marketing	
	12	Ecosystem services provided by forests	
<b>V</b>	<b>Forest Policy and Governance</b>		<b>15</b>
	13	Forest laws- necessity, General principles, Indian forest act	
	14	Community-based forestry and participatory approaches	
	15	Forest governance: stakeholders, institutions, and decision-making processes	

## Suggested Reading

1. A Hand book of Kerala Timbers- KFRI, Trichur.
2. B.S. Chundawat and S.K.Gautham. (1996). Text book of Agroforestry. Oxford and IBH Publishing House , NewDelhi
3. Parthiban K T (2016) Forestry, Competition Tutor publishers
4. Praveen Dhar T .(2018). Introduction to Forestry Narendra Publishing House, New Delhi
5. Sagreiya, K.P. (1994). Forests and Forestry (Revised by S.S. Negi). National book trust. NewDelhi.

## References

1. Singh M.P. and Vinita Vishwakarma.(1997) .Forest environment and Biodiversity. Daya publishing house, NewDelhi.
2. Tiwari K.M. (1983). Social forestry in India.
3. Tribhawan Mehta, (1981). A handbook of forest utilization. Periodical Expert Book Agency, NewDelhi

## Weblink

1. <https://www.esa.org/seeds/toolkits/forests/introduction-to-forestry/>
2. <https://www.britannica.com/science/forestry>
3. [https://agri-bsc.kkwagh.edu.in/uploads/departement\\_course/FRST-121\\_Forerstry\\_notes.pdf](https://agri-bsc.kkwagh.edu.in/uploads/departement_course/FRST-121_Forerstry_notes.pdf)