

Semester:	1		
Course Code:	ENCM 12732		
Course Name:	Forest Resources		
Credit Value:	2		
Status	Compulsory		
Pre-requisites	GCE A/L Biology		
Co-requisites	None		
Hourly Breakdown	Theory	Practical	Independent Learning
	25	15	60
Intended Learning Outcomes:			
<p>After completion of this course unit, the student will be able to;</p> <ol style="list-style-type: none"> 1. identify the current status of world's forests and major threats to forest resources, 2. describe ecosystem structure and processes with special reference to tropical forest ecosystem, 3. explain the governance of forest resources in Sri Lanka along with the forest policy and provisions in the Forest Act, 4. demonstrate skills in forest measurements and inventorying, and 5. improve written and oral communication and computer skills. 			
Course Content:			
<p>Introduction to world's forests: Current status of world's forests, ecosystem services of forests. Major threats to forest resources. Classification of Tropical forests. Patterns in Tropical Forests (Structural Concepts). Diversity of Tropical Forests (distinguishing structural characteristics, faunal diversity). Role of forests in bio geo-chemical cycling, N, P, K, C, water cycle in forests. Disturbance Ecology: Large Scale Disturbances and Succession, Small Scale disturbance and regeneration. Tropical forests under a changing climate. Reforestation. Forest tree growth and Biomass C. Natural microbial processes (decomposition), soil C and litter C. Principles of measurements and basic statistical concepts; Definition and measurements methods for individual tree and stand parameters; Main sampling designs used in forest inventories, Determination of tree volume and biomass.</p> <p>Governance of forest resource in Sri Lanka: National forest policy, Forest Ordinance.</p>			
Teaching /Learning Methods:			
A combination of lectures, field practical sessions, computer based learning, Supplementary Lecture Support Materials and reference materials self-studies, field based assignments and small group discussions.			
Assessment Strategy:			
Continuous assessment and end of semester examination. Percentage given for each sub component indicates the percent contribution to the final marks.			
Continuous Assessment 20 %		Final Assessment 80 %	
Details: Assignments 20	Theory 70	Practical 10	Other

Recommended Readings:

1. Jaboury, G. & S. Douglas (2010). Tropical Rain Forest Ecology, Diversity, and Conservation. Oxford Biology.
2. Kangas, A. & M. Maltamo (2006). Forest Inventory: Methodology and Application. Springer Publication, printed in Netherlands.
3. National Forest policy 1995 and Forest (amendment) Act No. 65 of 2009 of Sri Lanka.