Semester:	**7/8**		
Course Code:	ENCM 44763		
Course Name:	Forest Resources Management		
Credit Value:	3		
Status:	Compulsory for BSc Honours in ENCM degree		
Pre-requisite:	ENCM 12732		
Co-requisites	None		
Hourly Breakdown	Theory	Practical	Independent Learning
	42	09	99

Intended Learning Outcomes:

After completion of this course unit, the student will be able to;

1. explain sustainable forest management principles, relevant criteria and indicators to achieve general and specific forest management objectives,
1. explain forest plantation management techniques in plantation establishment, stand tending and harvesting,
2. discuss the forest industry related issues in Sri Lanka,
3. prepare forest site management plan, and
4. handle forest equipment, sampling site selection, representative sampling and reporting

Course Content:

General Forest Management objectives, Specific Forest Management objectives. Sustainable management of natural forests, SFM principles, SFM Criteria and Indicators. Agroforestry and social forestry concepts, Commercial forestry. Plantation establishment: site selection, species selection Plantation establishment: Site Preparation. Stand tending techniques: Thinning: Thinning types, thinning schedules, thinning tables. Stand tending techniques: Pruning: Pruning types, guidelines of pruning, pruning defects. Stand tending techniques: weeding, watering and fertilizer applications. Defining Rotation age and Industrial Harvesting Techniques. Silvicultural Techniques in Forest Management. Application of ecological concepts in Forest Management. Forest Management Plan Preparation: Spatial arrangement - maps and explanation, Basic database queries on FMP data. Forest Management Plan Preparation: Management set construction, Data check, normality and allowable cut. Utilization of timber volume assessment methods. Forest Industry and Issues: Climate Change and the future of forests. Forest industry and issues: Carbon storage, Pests and Diseases, Forest economics and global trade. Forest certification. Adaptive forest management. Current research and future directions: local and global.

Teaching /Learning Methods:
A combination of lectures, laboratory and field practical sessions, computer based learning, self-studies, Supplementary Lecture Support Materials and reference materials, 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%		
Assignments : 10 Practical reports 10	Theory 70	Practical 10	Other -

Recommended Readings:

1. Evans J. & John W. T. (2004). Plantation forestry in the tropics: The Role, Silviculture, and Use of Planted Forests for Industrial, Social, Environmental, and Agroforestry Purposes, 3rd edition, Oxford University Press.
2. Günter, S., M. Weber, B. Stimm & R. Mosandl (2011). Silviculture in the Tropics, Springer-Verlag Berlin Heidelberg.
3. Pete B., K. B. Jacek & S. D. Grebner (2017). Forest Management and Planning, 2nd edition, Academic Press.