Semester:	8		
Course Code:	ENCM 42873		
Course Name:	Marine and Coastal Resources Management		
Credit Value:	3		
Status:	Compulsory for BSc Honours in ENCM degree		
Pre-requisite:	ENCM 21703		
Co-requisite:	None		
Hourly breakdown:	Theory	Practical	Independent Learning
	40	15	95

Intended Learning Outcomes:

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

1. discuss the ecological and economic importance of marine and coastal production systems,
2. describe the major threats to marine and coastal production systems by anthropogenic and natural events,
3. discuss the various options adopted to manage the threats on coastal production systems posed by anthropogenic and natural events,
4. discuss the role of international conventions, government, non-governmental organizations and local coastal communities in the management and sustainable utilization of marine and coastal resources, and
5. assess the sustainable utilization, management and governance of coastal resources in a selected coastal region through field surveys.

Course Content:

Overview of the course unit. Classification of the coastal zone. Critical appraisal, and ecological and economic importance of the marine and coastal production systems: Open sea, Coral reefs, Mangrove forests, Sea grass beds, Estuaries and lagoons, Coastal marshes, Sand dunes and associated terrestrial forests. Anthropogenic activities on coastal production systems, and management: Coastal tourism, Sewage discharge, Oil spills, Aquaculture practices, Maritime transport and ballast water disposal, Global warming, and Over-fishing. Impacts of Tsunamis and tidal waves on coastal production systems. Marine protected areas (MPAs). Coastal erosion. Policy, legislation and institutional arrangement for coastal zone management: United Nations Convention on the Law of the sea (UNCLOS) with a brief mention to the coast conservation act in Sri Lanka, Marine Pollution Prevention Act of Sri Lanka. Use of remote sensing and mapping on the evaluation and assessment of coastal resources. Environmental impact assessment on marine and coastal systems. Economics and environmental politics of marine and coastal natural resources. Revenue-generation mechanisms in coastal production systems. Incentives for coastal resources management and conservation. Participation and role of the government, NGOs and coastal communities in the sustainable utilization, management and governance of coastal resources. Overview of coastal management concepts and principles; Principles and practice of integrated coastal zone management (ICZM).

Field survey in a selected coastal region in Sri Lanka to study the sustainable utilization, management and governance of coastal resources.

Teaching/ Learning Methods:

A combination of lectures, assignments, student seminars, and field survey.

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 40 %		Final Assessment 60 %		
Details:		Theory	Practical	Other
Assignments	10	60	-	-
Student seminars	10			
Field report	20			

Recommended Readings:

1. Clark, J. R. (2019). Coastal Zone Management Handbook. 1st edition. CRC press.
2. Clark, R. B. (2001). Marine Pollution. 5th edition. Oxford University Press.
3. CEA (1994). Conservation management plan: Muthurajawela marsh and Negombo Lagoon, Wetlands conservation project.
4. CEA (1994). Conservation management plan: Mundel Lake and Puttalam corridor channel. Wetlands conservation project.
5. Frid, C. & M. Dobson (2013). Ecology of Aquatic Management. 2nd Edition. Oxford University Press.
6. Kidd, S., A. Plater & C. Frid (2011). The Ecosystem Approach to Marine Planning and Management. 1st Edition. Published by Routledge.