

Semester	7		
Course Code:	ENCM 41793		
Course Name:	Wetland Management		
Credit Value:	3		
Status	Optional for BSc Honours in ENCM degree		
Pre-requisites	ENCM 21573		
Co-requisites	-		
Hourly Breakdown	Theory	Practical	Independent Learning
	40	15	95
Intended Learning Outcomes:			
After completion of this course unit, the student will be able to;			
<ol style="list-style-type: none"> 1. explain the functions and values of wetlands, 2. analyze ecological status of selected wetland systems 3. identify potential threats to wetlands and propose appropriate wetland management strategies, 4. discuss the importance of wetland restoration, constructed wetlands, and sustainable utilization of wetlands, and 5. explain how to identify wetlands for conservation, wise use of wetlands and wetland restoration. 			
Course Content:			
<p>Introduction to wetland ecosystems; Characteristics of wetlands; Wetland Hydrology and importance of wetland hydrology in wetland management; Wetland Biogeochemistry and Importance of wetland biogeochemistry in wetland management; Wetland biota and their ecological and economic importance; Importance of wetland biodiversity in wetland management; Wetland functions; Wetland degradation and threats to wetlands; Management of water allocation for maintaining the ecological functions of wetlands; Management of groundwater for maintaining the ecological functions of wetlands; Wise use of wetlands; Wetland restoration; Monitoring wetland health; Wetland Conservation; Constructed wetlands: characteristics, types and applications, Monitoring and assessment for water treatment efficiency of constructed wetlands, Potential uses of biomass produced in constructed wetlands; Sponge cities and their importance in flood risk management; Wetland cities and their accreditation scheme; National wetland policy and National wetland inventory; Transboundary wetlands of international importance and criteria for selecting wetlands of international importance; International conventions on wetland management.</p> <p>Case studies on wetland restoration projects, constructed wetlands, wetland conservation and management and sustainable use of wetlands in the local and international context. Field studies on characteristics of selected wetlands and identification of potential threats and impacts.</p>			
Teaching /Learning Methods:			
A combination of lectures, field studies, computer-based learning, 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 30 %		Final Assessment 70 %	

Details:		Theory	Practical	Other
Quizzes	10	70	-	-
Assignments	10			
Field reports	10			
Recommended Readings:				
1. Keddy, P. A. (2010). Wetland Ecology: Principles and Conservation. 2 nd Edition, Cambridge University Press.				
2. Mitsch, W. J. & J. G. Gosselink (2015). Wetlands. 5 th Edition, Wiley.				
3. Ramsar publications including briefing notes, technical reports, handbooks and fact sheets.				