

<b>Semester</b>	6		
<b>Course Code:</b>	ENCM 32792		
<b>Course Name:</b>	Urban Environmental Management		
<b>Credit Value:</b>	2		
<b>Status</b>	Optional		
<b>Pre-requisites</b>	ENCM 12752		
<b>Co-requisites</b>	None		
<b>Hourly Breakdown</b>	Theory	Practical	Independent Learning
	26	12	62
<b>Intended Learning Outcomes:</b>			
<p>After completion of this course unit, the student will be able to;</p> <ol style="list-style-type: none"> <li>1. analyze the current and emerging urban environmental problems in cities,</li> <li>2. explain existing methods, strategies and techniques that are used to address urban environmental problems,</li> <li>3. apply the principles and models of sustainable urban environmental management by integrating different aspects of urban environment, and</li> <li>4. explain the relationship and interaction among stakeholders governing urban environmental management attempts in different cases.</li> </ol>			
<b>Course content:</b>			
<p>Urbanization: Mechanisms, Urbanization in global perspective, Micro and macro urban environment, environmental issues in cities; Urban environment: types, land use patterns, ecologically important and environmentally sensitive areas, expectations, partnership development among multiple stakeholders; Urban infrastructure: Basic services, roads, drainage, electricity, telecommunication, educational, medical and recreational facilities, issues and infrastructure management, impact of urban development on natural resources; Urban water management: urban water cycle, urban water budget Links between water and other sectors of urban planning; rainwater collection and outflow management, urban storm water management, design of storm water drainage systems; Urban forestry: components of urban forestry, benefits of urban forests and contribution to SDGs, urban forest design and management, initiatives of urban forestry in Sri Lanka; Urban waste management: issues, strategies, waste management models for different urban settings, private initiatives in waste management, risks, opportunities and perspectives, eco towns; Urban wildlife management: components of urban wildlife management, providing safe passage for urban wildlife, Managing urban wildlife habitat at the local scale, Integrating wildlife conservation into urban planning; Urban disaster management: concept of urban disaster management and mitigation, floods, droughts, polluted water bodies, flash flood management; Urban heat management: mechanisms of urban heat Island formation, impacts on animals, environment and human health, mitigatory measures. Urban governance: policies and legal framework, partnership development among multiple stakeholders in urban environment management; Sustainability and built environment: Environmental planning and natural resources management, information and decision making in UEM, concepts of healthy cities, sustainable cities etc.; Initiatives of urban environmental management: conceptualizing urban environment, integrating environment in urban planning and management, urban heritage conservation.</p>			

<b>Teaching /Learning Methods:</b> A combination of lectures, field studies, computer-based learning, self-studies, field-based assignments and small group discussions.				
<b>Assessment Strategy:</b> 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			
<b>Recommended Readings:</b>				
1. Hanaki, K. (2008). Urban Environmental Management and Technology. Springer.				
2. Dodman, D., McGranahan, G. and Dalal-Clayton, B. (2013). Integrating the Environment in Urban Planning and Management: key principles and applications in the 21st century, UNEP, Nairobi.				
3. Van Bueren, E.M., van Bohemen, H., Itard, L. and Visscher, H. (Ed) (2012). Sustainable Urban Environments: An Ecosystems Approach. Springer, New York				
4. Hvitved-Jacobsen, T., Vollertsen, J. and Nielson, A. H. (2010). Urban and Highway Stormwater pollution: Concepts and Engineering. CRC Press.				
5. Josef, L. (1999) Sustaining Cities: Environmental Planning and Management in Urban Design. McGraw Hill.				