

COURSE CONTENT
(Free Elective)

Date June 2010

:
Academic Year 2010/2011

:
Study Year (if applicable) -

:
Course Code & Title EM9108 Urban Planning & Environment

:
Academic Unit 3

:
Pre-requisite Nil

:
Course Description

EM5108 Urban Planning & Environment

[Lecture: 39 hrs; Tutorial: 0 hr; Lab: 0 hr; Pre-requisite: Nil; Academic Unit: 3]

Learning Objective :

To gain an understanding how land use, transport, and environmental considerations can be integrated into urban planning to build a sustainable city.

Course Content :

Topics include urban planning practices, strategic approaches addressing urban land use, urban transportation, and urban environmental issues including sanitation, water supply, wastewater treatment, solid waste management, air emissions and noise control, as well as sustainability of the cities.

Course Outline :

S/N	Topic	Lecture Hrs	Tutorial Hrs
1.	Introduction to Urban Environment Sustainable cities Evolution of Cities	1 1 1	
2.	Evolution of Cities and Planning Historical context. Development issues in large cities. Problems of developing countries	3	
3.	Planning Process and Development Control <i>The planning process, types of urban plans. Land use and development control.</i>	3	

4.	Planning Process and Development Control Overseas planning practice. Urban planning in Singapore.	3	
5.	Planning Methodology Forecasting techniques for urban planning. Demographic and economic models.	3	
6.	Planning Methodology Plan formulation and evaluation, cost-benefit analysis. Energy issues in urban areas.	3	
7.	Urban Transportation Planning Land use and transport. Transportation planning process.	3	
8.	Urban Environmental Planning Urban environment. Sanitation. Sewage collection.	3	
9.	Urban Environmental Planning Wastewater treatment	3	
10.	Urban Environmental Planning Water supply. Drainage.	3	
11.	Urban Environmental Planning Solid waste collection, disposal, and reuse.	3	
12.	Urban Environmental Planning Air emissions and noise control. Ecological design. Green buildings.	3	
13.	Urban Environmental Planning Environmental Impact Assessment.	3	
Total:		39	-

Learning Outcome :

Students should be familiar with the following: concept of sustainable city, urban planning, urban transportation, urban environmental planning and management.

Student Assessment : Continual Assessment (up to 50%); Examination (min 50%)

Textbooks :

Nil

References :

1. Canter L.W., Environmental Impact Assessment (2 ed.) McGraw- Hill Inc. 1996.
2. Catanese, A.J. and Synder, J.C. (eds.), Urban Planning, 2nd ed., McGraw-Hill, New York, USA, 1988.
3. Foo, A. T. and Yuen, B., Sustainable Cities in the 21st Century, National University of Singapore, Singapore 1999.
4. Khublall, N. and Yuen, B., Development Control and Planning Law in Singapore, Longman Singapore, 1991.
5. Kubasek N.K., Silverman G.S., Environmental Law (5 ed). Pearson-Prentice Hall, New Jersey, 2005.

6. Leitman, J., Sustaining Cities – Environmental Planning and Management in Urban Design, McGraw-Hill, New York, 1999.
7. White, R. W., Urban Environmental Management, John Wiley & Sons, Chichester, 1994.
8. World Business Council for Sustainable Development (WBCSD). WBCSD Annual Review 2005 - From Awareness to Action. <http://www.wbcsd.org/>
9. Banister, D., Unsustainable transport: city transport in the new century, London, Spon Press, 2005.