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:**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Topic</th>
<th>Lecture Hrs</th>
<th>Tutorial Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction to Urban Environment</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustainable cities</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evolution of Cities</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Evolution of Cities and Planning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Historical context. Development issues in large cities. Problems of developing countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Planning Process and Development Control</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The planning process, types of urban plans. Land use and development control.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. **Planning Process and Development Control**  
Overseas planning practice. Urban planning in Singapore.  

5. **Planning Methodology**  
Forecasting techniques for urban planning. Demographic and economic models.  

6. **Planning Methodology**  
Plan formulation and evaluation, cost-benefit analysis. Energy issues in urban areas.  

7. **Urban Transportation Planning**  
Land use and transport. Transportation planning process.  

8. **Urban Environmental Planning**  

9. **Urban Environmental Planning**  
Wastewater treatment  

10. **Urban Environmental Planning**  
Water supply. Drainage.  

11. **Urban Environmental Planning**  
Solid waste collection, disposal, and reuse.  

12. **Urban Environmental Planning**  
Air emissions and noise control.  
Ecological design. Green buildings.  

13. **Urban Environmental Planning**  
Environmental Impact Assessment.  

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 :**


