

## Course Syllabus

- 1. Program of Study** Bachelor of Science (Environmental Science)  
**Faculty/Institute/College** Mahidol University International College,  
 Faculty of Environment and Resource Studies (FERS),  
 Mahidol University
- 2. Course Code** ICEN 483  
**Course Title** Physical Planning and Environment
- 3. Number of Credits** 4 (4-0-8) (Lecture/Lab/Self-study)
- 4. Prerequisite (s)** None
- 5. Type of Course** Elective Course
- 6. Trimester/Academic Year** 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> trimester/every academic year
- 7. Course condition** 5-20 students

### 8. Course Description

Concepts of physical planning in urban and regional levels, human settlement and community development process, land use and infrastructure planning based on physical factors, potential of natural resources and appropriate data from scientific method analysis, planning between urban and rural area in terms of ecology, environmental planning in urban and rural area based on integrated survey of their capacities and limitations.

### 9. Course Objective (s)

After successful completion of this course, students will be able to

- 9.1 describe factor of human settlement and physical plan
- 9.2 explain the concept and process of urban and community planning
- 9.3 analyze and plan of urban and community based on existing resources

### 10. Course Outline

Date	Topics	Hour			Instructor
		Lecture	Lab	Self-study	
30 Apr; 7, 14, May 2014	I. Introduction <ul style="list-style-type: none"> <li>• Human settlement               <ul style="list-style-type: none"> <li>– Rural/Urban development</li> <li>– Regional development</li> </ul> </li> <li>• Interaction between urban and rural areas               <ul style="list-style-type: none"> <li>– Rural ↔ Rural</li> </ul> </li> </ul>	12	0	24	Asst. Prof. Dr. Sittipong Dilokwanich

	<ul style="list-style-type: none"> <li>– Rural ↔ Urban</li> <li>– Urban ↔ Urban</li> <li>• Meaning and importance of physical planning</li> </ul>				
21, 28 May; 4, 11, 18, 25 Jun 2014	<p>II. Application of concepts in physical planning in community, urban and regional levels</p> <ul style="list-style-type: none"> <li>• Database of community, urban and regional areas</li> <li>• Resource classification and evaluation based on function, values and carrying capacity</li> <li>• Physical planning process <ul style="list-style-type: none"> <li>– Future search conference</li> <li>– Mental mapping</li> <li>– Potential surface analysis</li> </ul> </li> </ul>	24	0	48	Asst. Prof. Dr. Sittipong Dilokwanich
2, 9 Jul 2014	<p>III. Review of physical plans and planning process</p> <ul style="list-style-type: none"> <li>• Past and present situations</li> <li>• Trend of future situation</li> </ul>	8	0	16	Asst. Prof. Dr. Sittipong Dilokwanich
	<b>Total</b>	<b>44</b>	<b>0</b>	<b>88</b>	
<b>Final Examination on 16 July 2014</b>					

### 11. Teaching Method (s)

Lectures and (one) field survey

### 12. Teaching Media

Power point

### 13. Measurement and evaluation of student achievement

Student achievement is measured and evaluated by

13.1 The ability to describe factor of human settlement and physical plan

13.2 The ability to explain the process of community, urban and regional planning

13.3 The ability to analyze and plan of community, urban and region based on existing resources

Student's achievement will be graded according to the college and university standard using the symbols: A, B+, B, C+, C, D+, D and F.

Ratio of mark		
Lecture attendance and classroom participation		10%
Midterm Examination		45%
Final Examination		45%
	Total	100%

#### **14. Course evaluation**

- 14.1 Students' achievement as indicated in number 13 above.
- 14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

#### **15. Reference (s)**

- Cullingworth, B. and Caves, R.W., (2003), *Planning in the USA: Policies, Issues and Processes*, London, Routledge.
- Daniels, P. et al, (eds.) (2005), *An Introduction to Human Geography: Issues for the 21<sup>st</sup> Century*, Harlow, Pearson Education Limited.
- Dubois-Taine, G. and Henriot, C., (eds.) (2001), *Cities of the Pacific Rim: Diversity & Sustainability*, Paris, PUCA.
- ESCAP, (1999), *Strategic Environmental Planning*, New York, Economic and Social Commission for Asia and the Pacific, United Nations.
- Forman, R.T.T., (2008), *Urban Regions: Ecology and Planning beyond the City*, Cambridge, Cambridge University Press.
- HABITAT, (1996), *An Urbanizing World: Global Report on Human Settlements*, 1996, Oxford, Oxford University Press, United Nations Centre for Human Settlements.
- Lein, J.K., (2003) *Integrated Environmental Planning*, Oxford, Blackwell Publishing.
- McDonnell, M.J., Hahs, A.K. and Breuste, J.H., (eds.) (2009), *Ecology of Cities and Towns: A Comparative Approach*, Cambridge, Cambridge University Press.
- Suzuki, H. et al, (2010), *Eco<sup>2</sup> Cities: Ecological Cities as Economic Cities*, Washington, DC, The World Bank.
- Wheeler, S.M. and Beatley, T., (eds.) (2006), *The Sustainable Urban Development Reader*, New York, Routledge.

#### **16. Instructor**

Asst. Prof. Dr. Sittipong Dilokwanich

#### **17. Course Coordinator**

Asst. Prof. Dr. Sittipong Dilokwanich