Subject Description Form

Subject Code	CE114
Subject Title	Land Use and Sustainable Environment
Credit Value	3
Level	1
Pre-requisite / Co-requisite / Exclusion	Nil
Objectives	☒ Academic underpinning (BDR) Please specify: Construction and Environment ☐ Expansion of intellectual capacity and interdisciplinary learning (CAR) ☐ Language and communication (LCR) ☐ Enhanced understanding of China (CSR) *(more than 60% CSR-related content - Yes ☐ or No ☐)* ☐ Healthy living, self understanding and interpersonal skills ☐ Teamwork, leadership and entrepreneurship ☒ Critical and creative thinking and problem solving skills ☐ Cultural appreciation ☒ Social and national responsibility ☒ Global outlook and lifelong learning
Intended Learning Outcomes *(Note 1)*	Upon completion of the subject, students will be able to: a. Have an overview of current land use, environmental protection and sustainable issues in the environment. b. Appreciate the basic principles & methods of urban planning and sustainable development. c. Understand the local and regional practices of achieving environmental conservation and sustainability.
Subject Synopsis/ Indicative Syllabus *(Note 2)*	**1. Principles of land use and land management** Land cover & land use - definition and classification. Management of land use in legal prescriptions. Land tenure, ownership and public administration. **2. Monitoring and manipulating Land Information** Maps, aerial photos and satellite imagery. Monitoring the Earth from space. Concept of Positioning. **3. Urban Planning** Urban Planning - principles and impact. Town planning process in Hong Kong. Interaction between urban and environmental planning.

4. Principles of environmental sustainability

Definition of sustainability

Concepts of sustainable development; long-term approaches to environmental problems.

Interdependence of environment, society, and development

Stakeholders of sustainable development: government, civil society and businesses.

Measuring sustainability

Indicators of sustainability.

5. Sustainability issues

Air pollution

Sources of pollutants; Effects on human health and environment; Indoor air quality.

Waste management

The problem of waste; Waste from human activities and industrial processes. Effects on land use.

Ocean and fresh water resources

Limitation of water resources and effects of water pollution.

Wildlife and biodiversity

Food chain and importance of wetland and marine ecology; Environmental conservation.

Climate change

Evidence and effects of climate change; International efforts to cope with climate change.

Teaching/Learning Methodology

(Note 3)

- Fundamentals and main thrust of subject materials will be covered in lectures.
- Seminar on latest land use, urban planning, environmental and sustainability issues in Hong Kong.
- Tutorials on case studies of urban planning, environmental conservation, environmental impact assessment.
- Independent study
  - Coursework exercise
  - Site visit and project analysis

Assessment Methods in Alignment with Intended Learning Outcomes

(Note 4)

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c			
1. Individual & Group Project on Land Use	50%	√	√	√			
2. Project on Sustainable Environment	50%	√	√	√			
Total	100%						

To pass the subject, student must complete ALL assignments ON TIME, and get an overall grade of D or above.

Student Study Effort Expected	Class contact:	
	▪ Lectures (2 hrs x 12 lectures)	24 Hrs.
	▪ Tutorials (2 hrs x 6 tutorials)	12 Hrs.
	Other student study effort:	
	▪ Project preparation, coursework	28 Hrs.
	▪ Self-study	28 Hrs.
	Total student study effort	92 Hrs.

Reading List and References

Bailey, R., *An Introduction to Sustainable Development*, the Chartered Institution of Water and Environmental Management 1997, UK.

Hong Kong Planning Standards and Guidelines, Planning Department, Hong Kong Government.

O'Riordan, T., *Environmental Science for Environmental Management*, Longman Scientific & Technical, 1995, London.

Town Planning in Hong Kong, Planning Department, Hong Kong Government.

Day, A.(Ed.) (2005) *China's Environment and the Challenge of Sustainable Development*. Armonk, N.Y.: M.E. Sharpe, c2005.

Peng, X. and Z. Guo (Ed.) (2000) *The Changing Population of China*. Oxford: Blackwell.

Qu, G. (1994) *Population and the Environment in China*. Boulder: L. Rienner Publishers; London: Paul Chapman Publishing Ltd.

UNEP (1982) *Combating Desertification in China*: A Report on a Seminar. Nairobi: UNEP.

World Bank (2001) *China: Air, Land, and Water: Environmental Priorities for a New Millennium*. Washington, D.C: World Bank.

Xu G. and L.J. Peel (1991). *The Agriculture of China*. Oxford; New York: Oxford University Press.

Xu, X. (2003) *Urban Development and Urbanization in China: Selected Works of Professor Xu Xueqiang*. Guangzhou Shi: Guangdong Gao Deng Jiao Yu Chu Ban She.

Yeung, Y.M. (2005) *The Western Pearl River Delta: Growth and Opportunities for Co-operative Development with Hong Kong*. Hong Kong: Hong Kong Institute of Asia-Pacific Studies, The Chinese University of Hong Kong.

Yeung, Y.M. and J. Shen (Eds) (2004). *Developing China's West*. Hong Kong: The Chinese University Press.

Zhao, S. (1994) *Geography of China: Environment, Resources, Population and Development*, Wiley, 332p.

	地圖出版社(1984)，中國自然地理圖集，北京，地圖出版社。 席守誠 (1992)，中國地理環境與自然資源，北京，中國科學技術出版社。 顧朝林 (編) (1999)，中國城市地理。北京，商務印書館。 科學出版社 (2000)，中華人民共和國人口環境與可持續發展地圖集，北京: 科學出版社。