City University of Hong Kong

Information on a Course offered by School of Energy and Environment with effect from Semester A in 2014 / 2015

Part I

Course Title:	Energy, Environment and Sustainable Development
Course Code:	SEE8114
Course Duration:	One semester
Credit Units:	3
Level:	R8
Medium of Instruction:	English
Prerequisites: *(Course Code and Title)*	None
Precursors: *(Course Code and Title)*	None
Equivalent Courses: *(Course Code and Title)*	SEE5114 Energy, Environment and Sustainable Development
Exclusive Courses: *(Course Code and Title)*	Nil

Part II

Course Aims

This course guides students, with particular reference to Hong Kong and China, to:

(1) Recognise the sustainability challenges confronting humankind.
(2) Identify the uses and losses of energy
(3) Fundamental concepts of sustainability and to evaluate its significance
(4) To be able to assess local and global environmental issues and devising solutions to achieving sustainability
(5) Interlinking of environmental, social and economic aspects on sustainable development

Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	*Recognise the relationship between energy, environment and sustainable development.*	*Equal*
2.	*Identify the various forms of non-renewable and renewable energies.*	*Equal*
3.	*Recognize the Earth's resources and appreciate the need for prudent management of these resources.*	*Equal*
4.	*Relate energy and environmental issues with sustainable development.*	*Equal*
5.	*Suggest possible practices and enhancement of energy efficiency in industry and commerce that can contribute towards sustainable development.*	*Equal*
6.	*Become an environmental conscious and responsible citizen.*	*Equal*

Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	TLAs	Total hours (if applicable)
CILO 1	Lectures; class work	6.5
CILO 2	Lectures; class work	6.5
CILO 3	Lectures; class work	6.5
CILO 4	Lectures; class work	6.5
CILO 5	Lectures; class work	6.5
CILO 6	Lectures; class work	6.5

Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	Type of Assessment Tasks/Activities	Weighting (if applicable)	Remarks
CILO 1	Class work (8%) and examination (12%)	20%	
CILO 2	Class work (8%) and examination (12%)	20%	
CILO 3	Class work (8%) and examination (12%)	20%	
CILO 4	Class work (8%) and examination (12%)	20%	
CILO 5	Class work (4%) and examination (6%)	10%	
CILO 6	Class work (4%) and examination (6%)	10%	

Class work includes at least one of the following activities:

oral presentation (10%), in-class discussions (20%) and case study (30%).

Grading of Student Achievement:

Coursework: **60%**
Examination: **40%** (Duration of examination: two hours)

To pass a course, a student must do ALL of the following:

1) obtain at least 30% of the total marks allocated towards coursework (combination ofassignments, pop quizzes, term paper, lab reports and/ or quiz, if applicable);
2) obtain at least 30% of the total marks allocated towards final examination (if applicable); and,
3) meet the criteria listed in the section on Grading of Student Achievement.

Part III

Keyword Syllabus
Distinction of terms
Sustainable energy
Low-carbon society
Ecological Principles
Biodiversity and Conservation
Energy conservation, generation and storage
Renewable energy technologies
Sustainability Development System
Solid Waste Management
Standards, Regulations and Benchmarking mechanisms
Environmental Management System
Green Chemistry
Biorefinery
Life-cycle analysis
Environmental policy
Corporate Social Responsibility (CSR)
Air Pollution and Public Health

Recommended Reading
Text(s)

1. *Wong, M.H., Lee, F., W. K., Fung, M.K.F., 2006. Environmental Principles and Ethics - Textbooks. World Scientific Publishing Co. Pte. Ltd.*
2. *Cunningham, W.P., Cunningham, M.A., 2008. Environmental Science - A Global Concern, 10th ed. McGraw-Hill International Edition.*
3. *Baird, C., and Cann, M. 2012. Environmental Chemistry, Fifth ed., W.H. Freeman Palgrave Macmillan.*
4.

Online Resources

1.0 Sustainability related

www.un.org/esa/dsd
www.iisd.org
www.footprintnetwork.org
www.ecologicalfootprint.org
www.susdev.gov.hk/html/en/sd/index.htm

2.0 Corporate Environmental Management

www.epd.gov.hk
www.epa.gov/ems/index.htm
www.iso.org
www.epa.gov/oppt/epp/pubs/labeling.htm