



جامعة دبي
UNIVERSITY of DUBAI

General Education Department

Course Syllabus
Semester: Spring 2009/2010

Course code & No.: GCEI 100

Course Title: Contemporary Environmental Issues

Prerequisites: English 1

Class Hours: Time: 03:30pm to -06:30 pm

Days: M. Room: 622/623

Brief Course Description:

The purpose of this course is to explore environmental change on a global scale, emphasizing the fundamental concepts of matter, energy, and ecology as applied to Contemporary concerns. Environmental issues impacting the countries of the world are discussed; in order to develop an international perspective on the environmental challenges facing our planet.

General Education Program Outcomes:

- 1- Communicate effectively, think critically and make wise career decisions.
- 2- Develop a global perspective on ethical, cultural, economic and political issues.

General Skills:

- 1- Critical Thinking
- 2- Global Awareness
- 3- Ethical Awareness

Course Learning Outcomes (CLO):

Upon completing this course, the student should be able to:

- 1- **Describe** how human impact on the earth that has changed, and the environmental principles(Ch 1)
- 2- **Understand** the earth's basic geological processes and the nonrenewable mineral resources. . (Ch 14)
- 3- **Explain** the Environmental problems, their causes, and sustainability, (Ch 2-Ch18)
- 4- **Compare** the sources of energy. (Ch 15+Ch16)
- 5- **Discuss** the water resources, management and water and air pollution. . (Ch 14+Ch19 and Ch 21)

Bloom's Taxonomy

(The following percentage has been allocated each level of Bloom's taxonomy while developing the course objectives)

Bloom's level	1.Knowledge (K)	2.Comprehension (C)	3. Application (App)	4. Analysis (An)	5. Synthesis (S)	6. Evaluation (E)
CLO #	(1,3,5)	(2)		(4)		(5)
	30%	40%		20%		10%

CLO Mapping

This table maps CLO's to: CO, Program Concentration Outcomes (PCO), and Program Outcomes (PO)

CLO	State below CO	State below PO
#1 Describe human and environmental principles(Ch 1+ Ch 9)	1-Describe how human impact on the earth that has changed, and the environmental principles	Demonstrate the method of inquiry in the natural science
#2 Understand the earth's basic geological processes and the nonrenewable mineral resources. . (Ch 15+Ch17)	2-Understand the earth's basic geological processes and the nonrenewable mineral resources	Differentiate among facts , laws and hypotheses
#3 Explain the Environmental problems, and sustainability, (Ch (Ch2 +ch17)	3-Explain the Environmental problems, their causes, and sustainability	Define major concepts , principles and fundamental theories in at least one area of science
#4 Compare the sources of energy (Ch 15+Ch16)	4-Compare the sources of energy	Demonstrate the method of inquiry in the natural science
#5 Discuss the water resources , management of water, and air pollution (Ch 14+Ch19)	5- Discuss the water resources, management and water and air pollution	Demonstrate the method of inquiry in the natural science

Assessment Scheme

This Table maps CLO to the assessment scheme.

CLO	Class Work (40%)		Mid-term Exam 012/04/2010	Final Exam 12/6/2010 03:30pm-05:30pm
	Take home assignment + Class participation	QZ1 +QZ2		
#1	√	√	√	√
#2	√	√	√	√
#3	√	√	√	√
#4	√	√		√
#5	√			√
Presentation	√			
Total	20%	20%	25%	35%

Teaching Methods :

- 1- Class Lectures
- 2- Assignments class work, take home assignment
- 3- Class discussion, and invited speakers when applicable.
- 4- Field Study visit
- 5- Main Report+ presentation

Use of Modern Instructional Technology:

Use of power point presentations, overhead projectors and supportive class lectures and making use of the Internet Web-sites whenever applicable

Weekly Schedule:**Contemporary Environmental Issues Weekly/Daily Teaching Plan**

Day/Week	Date	Lecture	Ch	Chapter Objectives	Relation to CLO	Assignment/Reading	Assessment	Relation to Program Objectives
1	22-02-10	Introduction to subject	----					
2	01-03-10	Environmental problems and causes. Ch.1 Page 6	1	<p>The effect of the human population increase</p> <ul style="list-style-type: none"> • The earth resources • The principal types of pollution and how pollution are reduced and prevented. • The seriousness of the environmental problems. • The definition of sustainable society 	1	Take home assignment page 26 Reading core case study Living in the exponential age. Page 5	Quiz.1/Mid-term	1
3	8-03-10	Environmental problems and causes. And sustainability	1	Describe the four principles of sustainability	2	Take home assignment page 27 Reading Individual matter page 23	Quiz.1/Mid-term	1
4	15-03-10	Science, Systems, Matter and Energy	2	<ul style="list-style-type: none"> • To understand the environmental science, • To know what is meant by system, and complex system • To comprehend, inputs, throughputs and outputs 	3	Take home assignment pages 47, 48 Reading case study : Carrying out a controlled experiment. And Easter Island , Global warming page s 28, 31, 33	Main Project Hand Out Quiz.1/Mid-term	2
5	22-03-10	Matter and changes in Matter, Energy and Energy Laws, Means of sustainability. System input throughput and output	2	<ul style="list-style-type: none"> • To understand the environmental science, • What is matter and its types • What is energy and its types • To know what is meant by system, and complex system • To comprehend, inputs, throughputs and outputs 	3	Take home assignment learning on line, website page 47/48	Quiz.1/Mid-term	2,3
6	29-03-10	Field study visit		<ul style="list-style-type: none"> • To activate an environmental Awareness • To share the steps adopted for sustainable development in the UAE 		Taking notes Taking photos Recording video presentations		1
7	5-04-10	Biodiversity, species Interaction and Control	5	<ul style="list-style-type: none"> • Types of Interactions • What limits the Growth of populations. • To know the difference between the r-strategists and k-Strategists species 	4	Core case Study Southern Sea Otters page 100		1,5
8	12-04-10	The Human Population and its Impact	6	<ul style="list-style-type: none"> • To know the factors affecting human population size • To know the means to lower the human population 		Core Case study 135-136, Video case study	Mid term	

9	19-04-10	The Human Population and its Impact	6	<ul style="list-style-type: none"> To study the success that India and China had in slowing population growth. 	5	Case study and Video show	Mid Term	5
10	26/04/10	MID TERM EXAM Solutions Influencing Population size	7	<ul style="list-style-type: none"> Discuss how to control world population. 		Video case to be discussed, china and India case study	Mid Term	5
11	03-05-10 10-05-10	Geology and nonrenewable mineral resources	14	<ul style="list-style-type: none"> To define what is non renewable resources To understand the geology of the earth To know the process of formation of the rocks To discuss the limitations and usage of nonrenewable resources 	8	Case study pages 344/345 Take home assignment page 368/369	Main Project Hand in	5
12	17-05-10	Non Renewable Energy Resources	15	<ul style="list-style-type: none"> To understand what is meant by the renewable and non renewable energy resources To study the benefits and the drawbacks of the nonrenewable energy resources such as oil, gas, coal, nuclear 	8		OZ2 and Final Exam	4
13	24-05-10	Nuclear Energy Energy Efficiency,	15 16	<ul style="list-style-type: none"> To understand the principles of nuclear fission and fusion To study the effect of the radioactive waste To understand how to improve the energy efficiency To study how to reduce the waste 	9	Video case to be discussed on nuclear fusion	Final exam	5
14	31-05-10	Air Pollution Water pollution	18 20	<ul style="list-style-type: none"> To know the atmospheric layer To know the types of air pollutants and its specifications To know how to control air pollution To know types of water pollutants Water quality 	9	Article to be presented by the students, take home assignment page 417	OZ2 and Final exam	5
15	07-06-10			Presentations				
	12/06/10			Final Exam				

Educational Resources

Educational Resource	Description	Comments
Textbooks Required	Living in the environment, by G. Tyler Miller, publisher Thompson, 15 th Edition ISBN 0495125245	
Required readings:	Websites on internet, Daily news papers + reference books in libraries.	
Supporting readings:	Environmental Sciences, Global concern , W.P Cunningham, and B	

	Saigo, Published by : McGraw Hill, year 2007, ISBN 139780071105965	
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