## Environmental Science 110 --- Agricultural Sciences 110 Spring 2014

Instructor Contact Information Lecture Hours: 3 Days & times CRN Required Text Course Description	Charlotte Murray Home: 760-357-2865 Secretary 760-355-6155 Email: charlotte.murray@imperial.edu Office Hours: None Credits: 3 Tuesday and Thursday: 4:45-6:10 Ag 110 = 20199, Env. 110 = 20200 Environmental Issues & Solutions A Modular Approach, by: Norman Myers This course is designed to provide students with an overview and understanding
	of the interrelationships between humans and the natural environment. The class will focus on basic concepts of science and ecosystem theory, human impacts on the air, water, and land, environmental problems faced by the Imperial Valley that have regional and global consequences, and some of the proposed solutions.
Course Objectives	<ul> <li>Student will:</li> <li>Describe the role of science, the use of the scientific method, the importance of stewardship, and the concept of sustainability in the environmental field;</li> <li>Identify local and global environmental challenges;</li> <li>Describe the environmental impacts of human population growth and material consumption nationally and internationally;</li> <li>Identify some of the solutions that can address the population and consumption challenges;</li> <li>Describe the importance of protecting wildlife and habitats and conserving biodiversity;</li> <li>Describe the hydrological cycle and identify ways that humans negatively impact the cycle.</li> <li>Describe the quality of fresh water globally and identify major sources of water pollution;</li> <li>Describe the state and federal laws and regulatory agencies that govern environmental concerns of air, water, land, human health, and chemical hazards;</li> <li>Identify common human health effects of environmental exposures;</li> <li>Recognize the steps involved in risk analysis, how risk perception affects individual and group decision making, and strategies for managing risks;</li> <li>Describe agricultural practices in the Imperial Valley with regard to the following concepts: soil characteristics, use of irrigation, the benefits and drawbacks of fertilizer use and pest control, the environmental impacts in air, soil, and water, and the economic impact regionally and nationally;</li> <li>Identify the major sources of air pollution locally and nationally;</li> <li>Describe how materials are managed to minimize or eliminate environmental impacts;</li> <li>Describe the process of managing solid waste from source reduction to recycling;</li> <li>Identify solutions to local and global environmental problems</li> </ul>
General Expectations	Students must comply with all rules and regulations of Standards of Student Conduct outlined in the Imperial Valley College General Catalog.

- **Cell Phones and Pagers** All cell phones, pagers and other noise making devices must be **turned off or to vibrate** during class. If you must use these devices during class, I ask that you quietly and discretely leave the room.
- Talking in ClassStudents talking in class while the instructor or a guest is lecturing will be asked<br/>to leave. If inappropriate talking continues points may be deducted from your<br/>total score. Furthermore the student may be told to meet with the Campus<br/>Disciplinary Officer before being allowed to return to class. Disciplinary<br/>procedures are outlined in the General Catalog.

**Disability Information** Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. DSP&S Room 2117, Health Sciences Building, (760) 355-6313.

Student RightsStudents have the right to experience a positive learning environment and due<br/>process. Check the IVC General Catalog for further rights and responsibilities.

Late & Absent Policy If you find that you need to excuse yourself early on rare occasion you should make every effort to get to class early so that you can sit close to the door. This will allow you to leave the room without disrupting the learning environment for your fellow students. Similarly, if you should not be able to avoid being late, it is your responsibility to come in and sit down in a manner that will not be disruptive. Either of these events are NOT to be regular occurrences for any given student. Additionally, it will be the student's responsibility to obtain notes for any missed class.

**Class Requirements** Class grading will be based on points in the following distribution:

Simi-Weekly QuizTotal: 100 – 150 points2 or 3 Exams150-200 points eachSimi-Weekly ArticlesNeed to be submitted when you come intoclass, writing them up is not to be done during class time.

The score for the articles is calculated as follows:

- 5 Points for the 2 articles,
- 5 Points for the write-up and

5 points for your opinions. Your opinion should concern the environmental issues discussed by the article - - not on how well you thought the articles were written. This is not an English class.

Points will be deducted if; the articles are late, if the articles are too short, if you have only one article, if the discussion is poor or too brief. Articles must be at least one page long or longer and the two articles combined should be about five pages in total. An extra 5 points will be given for articles that cover local environmental issues.

Articles: Choose two articles on the same subject that deal with human impact on the environment (eg. Earthquakes affect humans but we do not cause them – earthquakes are NOT good subjects for articles). Get them from the newspaper, magazines the internet, where ever. Write a brief description on what each of the articles say – a little like a brief book report. Then give **your** opinions on the articles – both POSITIVE and NEGATIVE. This critique should be about the information the articles contains NOT about how well the articles were written.

GradingA = 100 - 90%B = 89 - 80%C = 79 - 70%D = 69 - 60% $F = \le 59\%$ 

**Class Participation** Each student is expected to read the assigned material before coming to class. This will enable you to participate in the class discussions. Being able to interact in this manner will have positive effects on your quiz and exam performance.

**Exams** Exams may include true/false, short answer, multiple choice, and short essay questions. Exams will be worth 150-200 points each. **MAKE-UP EXAMS** and quizzes must be taken at the next class meeting unless otherwise discussed.

**Institutional Student Learning Outcomes:** Students who complete a degree of certificate at IVC will demonstrate competency in these five areas: communication skills, critical thinking skills, personal responsibility, information literacy, and global awareness.

## Course Student Learning Outcomes:

- 1. Identify important issues in environmental science at the local, state, national or international levels. Issues like air and water quality, species diversity, soil and land use. This will include the4 various causes, possible long term repercussions and possible solutions.
- 2. Identify traditional and alternative energy sources including advantages and disadvantages of each.
- 3. Discuss the growing human population and the related demand for resources like water, power, soil food etc., and the impact that it places on agriculture.

DATE	CHAPTER	What is due on Thursday
Jan 21 & 23	Chapter 8 Species Extinction	· · · · · ·
Jan 28 & 30	Chapter 8 continued	Article
Feb 4 & 6	Chapter 8, Start Chapter 1 Environmental Sci. & Sustainability	Quiz
Feb 11 & 13	Chapter 1 continued	Article
Feb 18 & 20	Chapter 1, Start Chapter 4 Food Resources	Quiz
Feb 25 & 26	Chapter 4 continued	Article
March 4 & 6	Chapter 4 continued	Quiz
March 11 & 13	<b>Tuesday Exam Chapter 1, 4, &amp; 8</b> Chap 15 Environmental Health Hazards	Article
March 18 & 20	Chapter 15 continued	Quiz
March 25 & 27	Chapter 5 Energy Efficiency and Renewable Energy	Article
April 1 & 3	Chapter 5 Start Chapter 6 Nonrenewable Energy	Quiz
April 8 & 10	Chapter 6 Continued	Article
April 15 & 17	Chapter 6 Thursday Exam Chapters 5, 6, 15	
April 21 - 25	Spring Recess no class	
April 29 May 1	Chapter 12	Article
May 6 & 8	Chapter ???	
May 13	Chapter ??	
May 15	Final Chapter 12 & ??	

## Spring 2014 Schedule -- subject to modification.