Basic Course Information

Semester	Spring 2016	Instructor's Name	David Bradshaw
Course Title & #	AG 110/ENVS 110	Instructor's Email	david.bradshaw@imperial.edu
CRN #	20009/20010	Webpage (optional)	n/a
Room	2727	Office (PT Faculty:809)	n/a
Class Dates	2/16/16 - 6/7/16	Office Hours	n/a
		(n/a for PT Faculty)	
Class Days	Tuesday	Office Phone #	(760) 427-7586 Mobile
		(PT may use dept. number)	
Class Times	6:30 pm – 9:40 pm	Who students should	Please send email to:
		contact if emergency	debradshawy@yahoo.com
Units	3.0	or other absence	

Course Description

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 in the Imperial Valley that have regional and global consequences, and some of the proposed solutions.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1. Identify important issues in environmental science at the local, state, national or international level (such as air and water quality, species diversity, soil and land use etc.) including the various causes, possible long term repercussions and possible solutions. (ILO1, ILO2, ILO3 & ILO4)
- 2. Identify traditional and alternative energy sources including advantages & disadvantages of each. (ILO2 & ILO4)
- 3. Discuss the growing human population and the related demand for resources (water, power, soil, hunger, etc.) and the impact that it places on agriculture. (ILO1, ILO2, ILO4 & ILO5)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- 1. Describe the role of science, the use of the scientific method, the importance of stewardship, and the concept of sustainability in the environmental field. The student will also identify local and global environmental challenges.
- 2. Recognize and describe the science, structure, function, dynamics, adaptations of and major threats to local and global ecosystems.
- 3. Describe the environmental impacts of human population growth and material consumption

nationally and internationally. The student will also identify some of the solutions that can address the population and consumption challenges.

- 4. Describe the importance of protecting wildlife and habitats and conserving biodiversity. The student will identify endangered species found in the Imperial Valley agricultural fields, drains and canals, at the Salton Sea and local deserts and describe efforts to protect them. The student will also describe the characteristics of distinct local habitats (the Salton Sea and the deserts) and the efforts to effectively manage and conserve them.
- 5. Describe the hydrological cycle and identify ways that humans negatively impact the cycle. The student will describe the quality of fresh water globally and identify major sources of water pollution. The student will apply these principles to local water bodies such as the New and Alamo Rivers and the Salton Sea. The student will also describe the political aspects of water allocations of the Colorado River and its impact on the Imperial Valley.
- 6. Describe the state and federal laws and regulatory agencies that govern environmental concerns of air, water, land, human health, and chemical hazards. The student will also describe the use of costbenefit analysis in the development of environmental policies.
- 7. Identify common human health effects of environmental exposures. The student will recognize the steps involved in risk analysis, how risk perception affects individual and group decision making, and strategies for managing risks.
- 8. 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.
- 9. Identify the major sources of air pollution locally and nationally. The student will recognize the benefits and environmental impacts of fossil fuels and describe alternatives to its use such as the development of solar, wind, and geothermal energy and the development of public transportation systems and alternative fuels for vehicles.
- 10. Describe how materials are managed to minimize or eliminate environmental impacts. The student will identify the federal regulations governing the clean-up and handling of chemical and hazardous materials. The student will also describe the process of managing solid waste from source reduction to recycling.
- 11. Identify solutions to local and global environmental problems. The student will also describe how politics, citizen involvement, and personal commitment can shape these solutions.

Textbooks & Other Resources or Links

Myers, Norman, Spoolman, Scott E. (2014) or later. *Environmental Issues & Solutions*

Belmont Cengage Learning. ISBN: 9781435462311

Course Requirements and Instructional Methods

<u>Out of Class Assignments</u>: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time <u>and</u> two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

For writing assignments I expect you to demonstrate proficiency in the use of the English Language. Grammatical errors and writing that do not express ideas clearly will affect your grade. Students who are unable to write correctly and have trouble expressing ideas clearly are urged to contact the appropriate campus resources for assistance.

Course Grading Based on Course Objectives

Class Requirements

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

Presentation	50 points
Position Paper	100 points
Group Work	50 points
Quizzes	100 points
<u>Exams</u>	200 points

Class Participation

Total

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.

500 points

Position Paper

During this semester you will be required to write a paper on local environmental issues. Papers must be two pages typed in 12 point font, double spaced. The paper is worth 100 points. There will be a deduction of points for grammar, margins, format and spelling.

Group Presentation

You will be required to work in a group on one class presentation. I will provide some class time to do group work. However if you feel your group needs more

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time then you will need to make arrangements with your group to work outside

of class.

Quizzes There will be around 10 quizzes given this semester. The quizzes will mainly be

over your assigned reading, previous regular/guest lecture. Each quiz is worth 10

points. No make-up quizzes will be given.

Exams Two exams will be given. Exams may include true/false, short answer,

multiple choice, and short essay questions. Exams will be worth 100 points each.

Lecture Topics Focus on local renewable energy including solar and geothermal with an

emphasis on water resources in the Imperial Valley.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity
 of an online class will be dropped by the instructor as of the first official meeting of that class. Should
 readmission be desired, the student's status will be the same as that of any other student who desires to
 add a class. It is the student's responsibility to drop or officially withdraw from the class. See General
 Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused
 absences exceed the number of hours the class is scheduled to meet per week may be dropped. For
 online courses, students who fail to complete required activities for two consecutive weeks may be
 considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- <u>Electronic Devices:</u> Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor.
- <u>Food and Drink</u> are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- <u>Disruptive Students:</u> Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the *General Catalog*.
- <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

<u>Plagiarism</u> is to take and present as one's own the writings or ideas of others, without citing the source.
 You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how too correctly 'cite a source', you must ask for help.

<u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use
materials, or assisting others in using materials, or assisting others in using materials, which are prohibited
or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

Additional Help - Discretionary Section and Language

- <u>Blackboard</u> support center: <u>http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543</u>
- <u>Learning Labs</u>: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- <u>Library Services:</u> There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

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. If you feel you need to be evaluated for educational accommodations, the DSP&S office is located in Building 2100, telephone 760-355-6313.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC *General Catalog* available online at

http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Class Schedule – *Note: Dates are subject to change.*

<u>Date</u>	Topic	Type .
02/16/16	Introductions, Syllabus	<u>Tapped DVD</u> lecture
02/23/16	Mod. 1: Environmental Science and Sustainability	DVD quiz, lecture
03/01/16	Mod. 2: Population Growth	Mod. 1 quiz, lecture
03/08/16	Mod. 3: Urbanization	Mod. 2 quiz, lecture
03/15/16	Mod. 4: Food Resources, <u>Food Inc. DVD</u>	Mod. 3 quiz, lecture
03/22/16	Mod. 6: Non-Renewable Energy (note module order)	Mod. 4 and DVD quiz, lecture
03/29/16	Winter Recess	
04/05/16	Mod. 5: Renewable Energy <u>Power Surge DVD</u>	Mod. 6 quiz, lecture
04/12/16	Mod.10: Water Resources, IV Water Issues	Mod. 5 and DVD quiz, lecture
04/19/16	Midterm, Imperial Valley Water, Salton Sea	Midterm Exam, lecture
04/26/16	Mod.11: Water Pollution, I.V. Water Quality	I.V. Water quiz, lecture
05/03/16	Cadillac Desert DVD 1, Term Paper Assignment	Mod. 11 quiz, lecture
05/10/16	Class Presentations 1	DVD quiz, presentations
05/17/16	Class Presentations 2	lecture, presentations
05/24/16	Mod.12: Air Pollution, Gas Land DVD	DVD quiz
5/31/16	Final Review	Lecture
6/07/16	Final Exam	