

Environmental Science ENVS 110 Syllabus
(Cross listed as Agriculture 110)
CRN: ENVS 10001, AG 10002
Imperial Valley College, Fall 2015



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Office hours: As an adjunct I do not have regular office hours, please make an appointment if you need to see me. I encourage you to do so! (All questions are welcome, including “What is the meaning of life?” and “Why does a course in environmental science not have field trips?” and “How can I get my dog to stop eating my homework?”)

Class Schedule: Tuesday and Thursday 1:30 – 2:55 PM Room 2734

Course Description: This 3.0 credit course provides the student with an overview of the relationship between humans and the natural environment. The class will focus on basic concepts of science and ecosystem theory as related to the environment; human impacts on the air, water, and land; environmental problems faced by humans that have regional and global consequences, including proposed solutions at a the individual, local, and global level.

Course Objectives: Students should develop enhanced knowledge, understanding, awareness, and appreciation for ecosystems and biodiversity. Ideally students will develop a personal environmental ethic and envision their role and responsibility in ensuring a sustainable future for their communities, including all living things represented within that community.

Required Text: Environmental Issues and Solutions: A Modular Approach. Myers and Spoolman © 2014 or 2015. One copy is on hold in the library, and you can rent it from online sources.

Additional Class Text on hold in the Library: *The Pearson Custom Library for Environmental Science*, Imperial Valley College, Environmental Science. © Pearson Learning Solutions, 2011. (This textbook is a custom compilation of Chapters from two Texts:

- (1) *Environmental Science: Toward a Sustainable Future*, 11th Edition, Richard T Wright and Dorothy E. Boorse, 2011, Pearson Education Inc.; and
- (2) *Essential Environment: The Science Behind the Stories*, 3rd Edition, Jay Withgott and Scott Brennan, 2009, Pearson Education Inc.)

Supplemental Readings: Throughout the semester you will be given supplemental readings, videos, films, and podcasts. Be sure you listen during each class to hear if/when such additions are assigned. These assignments will also be posted online.

Students will:

- Be able to discuss the a) science, b) controversy, c) problems, and d) solutions relevant to every major topic and overriding concept covered in class; be able to describe and discuss solutions at the individual, local, national, and international level.

- Learn and develop critical thinking and problem solving skills that will enable them to creatively contribute to a sustainable culture with a positive quality of life for all involved;
- Gain skills in information research, written, and verbal communication;
- Gain knowledge in ecological challenges and sustainable technologies;
- Learn how to reduce their ecological footprint;
- Learn to identify some local native plant and animal species and understand their roles in ecosystems.
- Learn and understand what consumptive and non-consumptive 'ecosystem services' are, and how such services contribute to the quality of our lives and communities. Toward these ends class activities, tests, and homework are required components of this course;
- Understand and describes climate change, global warming, the international problems associated with such, be able to discuss local and global solutions to the problem.
- Describe and understand the role of science, evolution, the use of the scientific method, the importance of stewardship, and the concept of sustainability in the environmental field;

General Expectations:

- Food and Drink are prohibited in all classrooms.
- Disruptive Students: 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.
- Students must comply with all rules and regulations included in the Standard of Student Conduct in the Imperial Valley College General Catalog.
- I teach with the assumption that as a college student you are an adult, meaning I will treat you with the respect and maturity I maintain for all adults, and therefore I expect you to do the same with me. It is your responsibility to conduct yourself as a mature, professional individual fully responsible for your actions.
- In group project(s), each student is expected to do their fair share of the work. If you are having issues with this and other group participants, don't hesitate to speak to me.
- Students have the right to experience a positive learning environment, and your instructor has the right to teach without unnecessary distraction. **Repeatedly talking to other students during lectures, using cell phones, arriving late or leaving early, or frequently walking in and out of the class while it is in session is disrespectful, disruptive, and unprofessional and will not be tolerated. Infractions of this will result in reduction in your grade and/or dismissal from class as appropriate.**
- Repeat tardiness will be noted and will adversely affect your grade.
- Having fun in class while following rules and participating in discussion is highly recommended....

Cell phones, pagers, music devices: All cell phones and other electronic items must be put away and have sound turned off. NO USING LAPTOPS or CELL PHONES DURING CLASS. IF YOU ARE USING YOUR CELL PHONE OR LAPTOPS DURING CLASS, YOU WILL BE ASKED TO LEAVE. THIS RULE WILL BE ENFORCED, AND IF ASKED TO LEAVE FOR INFRACTION OF THESE RULES AND YOU WILL BE MARKED ABSENT FROM CLASS. If you need to use a phone for an emergency, you should leave class to do so.

Adding/ Dropping: If you add the class, you must do so before the IVC deadline. If you are given an add code it is your responsibility to access your WebSTAR account and add the class using the authorization code as soon as possible. If you stop coming to class, you must official drop yourself; it is your responsibility to complete a drop request if you are withdrawing from the class. If you fail to complete a withdraw / drop request, but have stopped coming to class, you will receive an "F" for the class. If you do not understand these instructions, please ask for help.

Assignments: It is your responsibility to seek help with study skills, reading, or writing. For writing assignments I expect you to demonstrate a 12th grade high school level of proficiency in the use of the English Language. Grammatical errors and writing that inhibit clear expression of subject matter will affect your grade. Students who have problems with English, grammar, writing skills, and similar are HIGHLY encouraged to seek assistance at one of the learning centers on campus. **If you have trouble with writing in general or English as a second language, it is recommended – and your responsibility - to have someone proof-read your grammar for written homework assignments.** (See Writing and Language labs, below).

Attendance: If you miss any class activities it is **your** responsibility to find out what you have missed, and how you can get caught up. **In accordance with IVC policy, a student who is absent for two classes with no valid excuse can be dropped from the class.** You are responsible for getting the missed material *from another student, not from the instructor, unless you have a specific question or request.* Students who miss the first day of class will automatically be dropped.

Tardiness and early departure: Students who arrive after class has begun may be marked absent. Two tardies / early departures count as one absence.

Cheating and Plagiarism: IVC expects honesty and integrity from all students. A student found to have cheated or plagiarized will receive a zero for the assignment; cheating or plagiarism may also result in dismissal from class and expulsion from IVC as outlined in the General Catalog.

- Plagiarism 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 to correctly 'cite a source', please ask for help.
- Cheating 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

MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "C": Upon satisfactory completion of the course, students will be able to:

- Recognize and describe the science, structure, function, dynamics, adaptations of and major threats to local and global ecosystems.
- 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.
- 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.
- Describe the importance of protecting wildlife and habitats and conserving biodiversity. The student will identify endangered species found 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.

- 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.
- 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 cost-benefit analysis in the development of environmental policies.
- Identify 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 reducing risks.
- 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.
- 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.
- 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.
- Identify solutions to local and global environmental problems. The student will also describe how politics, citizen involvement, ethics, and personal commitment can shape these solutions.

To Achieve an “A” in class: Don’t miss classes, do the readings before-hand, do the homework, hand in all assignments on time, ask when you have questions, participate in discussion, come to class with an open mind, leave class with discussion questions for your peers, enjoy learning new things that will apply to the rest of your adult life.

In most assignments, lectures, and activities, multiple objectives will be included, rather than covering each objective in a distinct lesson. This is due to the fact that environmental science is based on studying interconnected systems and on learning to think in a holistic way, i.e., “global awareness”. This is one of several reasons why excellent attendance is important to get a good grade in this class.

Class Grading: Your final grade in the class will be based on points received for the following:

Individual Class Participation: 20 points

Homework Assignments: 5 to 10 points each depending on the assignment

Class Project or Research paper: 100 points

Quizzes: 10 – 15 points EACH

Exams (2): 100 points EACH

Extra Credit: maximum 4 points to *final* score, extra credit must be ok’d and arranged with instructor.

A: 90 - 100% B: 80 – 89 % C: 70 – 79 % D: 60 – 69 % F: Below 60%

As assignments are given I will tell you how many points they count for towards your total score. I do not give letter grades on individual assignments, your letter grade is calculated at the end of the

semester. It is up to each student to calculate the equivalent letter grade if you wish, according to this formula:

Your points, divided by total points possible, x 100 = your percentage in class. Then apply your percentage to the letter scale above. For example: If a quiz is worth 15 points and you receive 11 points on it, you divide 11 points by 15 points possible X 100 = 73% = C letter grade.

You are expected to keep track of your own progress in the course as the semester progresses, using the formula above for all your assignments. If you have trouble with this formula, ask for help from your instructor. **You must keep all your graded assignments and other graded materials until the end of the course.**

Homework Assignments: Readings from the text and supplements will help you understand the lectures and activities better and help prepare you for the exams. You will also be expected to prepare outside of class for any class project, writing, and research assignments. Assignments will be given as semester proceeds, along with due dates.

Quizzes and Exams: Anything presented may be included: lectures, readings, class activities, films, etc. Exams may include essay questions geared to test your critical thinking skills in respect to class topics. Exam dates will be announced in class. **There are no make-up exams and late assignments will not be accepted unless special circumstances have been pre-arranged.**

Extra Credit: Opportunities to earn extra credit points *may* be offered, details will be provided in class.

Disability Information: Any student with a disability who may need educational accommodations should notify the Disabled Student Programs and Services office, located in the Mel Wendrick Access Center, Building 2100, Room 2117, (760) 355-6312 or (760) 355-4174 (TDD). If you have a question about a disability in regards to my instruction, do not hesitate to speak to me about it after class, or schedule an appointment to talk.

Student Health Services: Students have counseling and health services available, provided by the pre-paid Student Health Fee, including a mental health counselor. For information see <http://www.imperial.edu/students/student-health-center/>. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Computers, writing, research, and study skills assistance:

Business/General Computer Lab: A general computer lab is available for students in room 901 with basic services and applications, including Internet access.

Math Lab: The math lab has 40+ computers with internet access and Microsoft Office software. The lab also includes: study rooms, computer tutorials, videos, mathematics software, reference books, and tutoring.

Writing Lab: The writing lab may be used by any IVC student who needs help with an essay or writing assignment. Students will be asked for an IVC ID card to check in the lab. Students may also use the computers or internet when space is available for class assignments.

Language Lab: The Language lab is available to all students enrolled in Foreign Language, English, or ESL classes. The lab offers an individual multimedia learning experience as a supplement to formal class instruction.

Study Skills Center: Josue Verduzco, (760) 355-6384. If your method of studying is not enabling you to get the grade you desire, talk to your instructor, and/or check out this Center.

Library: If you are unsure how to use the materials the library has to offer, ask a librarian for a tutorial of what resources available and how to use them. 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/>

Blackboard support center: <http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543>

Student Email: IVC students are expected to check their email on a frequent and consistent basis in order to stay current with college-related communications. **Students have the responsibility to recognize that certain communications may be time-critical.** Students should not rely on any courtesy email forwarding or other means to ensure they are receiving important IVC information! Get accustomed to checking this email account at least once a day while a student at IVC.

Online reading and homework assignments, announcements: I will post articles, homework details, handouts, or additional lecture notes online so that students have access to them aside from hard copies. There may also be occasional announcements or other important information, **you should get in the habit of checking online daily, before class to check for updates and recent additions.**

My faculty website:

for ENVS 110: <http://faculty.imperial.edu/renee.owens/itemlist/category/630-envs-110>

Or go here: <http://faculty.imperial.edu/renee.owens> then select "ENVS 110" on the right hand menu.

Class Schedule

Note: This schedule is subject to change. Use it as a guide, but be sure and listen for changes that will be announced either at the beginning or end of any given class. Bring this to every class. "TBA" = To Be Announced

Date	Topic	Chapter(s) also called Module(s)	Assignments DUE / Quizzes <i>Use this area to write in dates provided throughout the semester</i>	
Aug 18 Aug 20	Introduction Sustainability and Critical Thinking	1		
Aug 25 Aug 27	Evolution Water	TBA 10, 11		
Sept 1 Sept 3	Water Ecology	9		
Sept 8 Sept 10	Ecology Conservation and Extinction	8		
Sept 15 Sept 17	Conservation and Extinction Wastes	14		
Sept 22 Sept 24	Air Pollution Climate Change	12 13		
Sept 29 Oct 1	Climate Change Mineral Resources	7		
Oct 6 Oct 8	Student Projects MidTerm Exam	TBA		
Oct 13 Oct 15	Food and Agriculture Food and Agriculture	4		
Oct 20 Oct 22	Food and Agriculture Environmental Health	4 15		
Oct 27 Oct 29	Environmental Health Environmental Health	15 1		
Nov 3 Nov 5	NonRenewable Energy NonRenewable Energy	6		
Nov 10 Nov 12	Renewable Energy and Conservation Renewable Energy and Conservation	5		
Nov 17 Nov 19	Sustainable Communities Sustainable Communities	3		
Nov 24 Nov 26	Population Growth Thanksgiving vacation	2		
Dec 1 Dec 3	Population Growth Student Projects	2 TBA		
Dec 8 Dec 10	Student Projects Final Exam	TBA		