

**Environmental Science ENVS 110 Syllabus
(Agriculture 110)**

CRN: ENVS 10035, 10036, 10953, AG 10027, AG 10028, Ag 10952
Imperial Valley College, Fall 2013



Instructor: Renée Owens Email: renee.owens@imperial.edu
Faculty website: <http://faculty.imperial.edu/renee.owens>

Office hours: As an adjunct I do not have an office or regular hours, please make an appointment if you need to see me. Also I am usually available immediately after class at 3:00 PM.

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 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.

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;

Required Text: Environmental Issues and Solutions: Myers and Spoolman © 2014 Brooks/Cole
Cengage Learning ISBN 13: 978-0-538-73560-5

Supplemental Readings: Students are HIGHLY encouraged, though not required, to purchase an additional text that provides greater detail on all the topics; a text that is relevant, interesting, and easy to comprehend by undergraduate college students. It can be purchased for \$30 or less on Amazon: ***Environmental Science: Toward a Sustainable Future, 11th Edition***, by Richard T. Wright and Dorothy Boorse

Additional 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.)

General Expectations:

- 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, which means that 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, please see me for advice or intervention.
- 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 and 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.

Cell phones, pagers, music devices: All cell phones and other electronic items must be put away and have sound turned off. Students may not wear a blue-tooth or similar device during class. If you are found using a laptop for games, Facebook, Tweeting, or **anything** not directly related to lecture notes, you will be asked to leave. If you are using your cell phone during class, you will be asked to leave. If you need to use a phone for an emergency, leave class to do so. This rule will be strictly enforced, you may be asked to leave for infraction of these rules and you will be marked absent from class.

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.

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 proficiency in the use of the English Language. Grammatical errors and writing that do not clearly express ideas will affect your grade. Students who have problems with English, grammar, writing skills, and similar are 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 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 excuse can be dropped from the class. You are responsible for getting the missed material from another student, not from the instructor. 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.

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

- 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.
- Recognize and describe the science, structure, function, dynamics, adaptations of and major threats to local and global ecosystems.
- 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.

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”.**

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

Individual Class Participation: 50 points

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

Class Project: 100 points

Quizzes: 10 points

Exams (2): each worth 100 points

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. 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. Make sure you 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 will usually 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.

Extra Credit: Opportunities to earn extra credit points will be offered in the 2nd half of the semester, details will be provided online.

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.

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 44 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.

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! The best strategy is to get accustomed to checking this email account at least once a day while a student at IVC.

BLACKBOARD or My Faculty Website online: 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, **it is important to check the website daily, and before each class, to check for updates and recent additions.**