

| Basic Course Information |                               |                     |                             |  |
|--------------------------|-------------------------------|---------------------|-----------------------------|--|
| Semester:                | Summer 2022                   | Instructor Name:    | Dr. Patrick S. Pauley       |  |
| Course Title & #:        | ENVS/AG 110                   | Email:              | Patrick.pauley@imperial.edu |  |
| CRN #:                   | 30014/30015                   | Webpage (optional): | N/A                         |  |
| Classroom:               | Online (CANVAS)               | Office #:           | Online (Email)              |  |
| Class Dates:             | June 20, 2022 – July 28, 2022 | Office Hours:       | N/A                         |  |
| Class Days:              | N/A (Online)                  | Office Phone #:     | (760) 355 - 6363            |  |
| Class Times:             | N/A (Online)                  | Emergency Contact:  |                             |  |
| Units:                   | 3                             | Class Format:       |                             |  |

## **Course Description**

This course is designed to provide students with an overview and understanding of the relationships between human populations and the natural environment. The class will focus on basic concepts of science and ecosystem theory, human impacts on the biosphere, air, water, land, and environmental problems faced by the Imperial Valley that have regional and global consequences, and some of the proposed solutions. Field trips and activities may be included in this course. (Same as AG 110) (CSU, UC)

## Course Prerequisite(s) and/or Corequisite(s)

None

### **Student Learning Outcomes**

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)

### **Course Objectives**

Upon satisfactory completion of the course, students with a grade of "C" or better 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 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, deserts, agriculture) and the efforts of effectively manage and conserve them.
- 5. Describe the hydrological cycle and identify ways that humans negatively impact it. 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 bodies of water such as the New, Colorado 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 cost-benefit 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 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 pest control and fertilizer use; the environmental impacts in air, water and soil 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 had 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**

Environmental; The Science Behind the Stories, by Jay Withgott & Matthew Laposata - ISBN 978-0-13-448599-7

## **Course Requirements and Instructional Methods**

### Exams:

There will be six (6) exams covering chapters assigned. The power points have already been uploaded.

### Assignments:

In addition, there will two (2) papers. Green New Deal and Pandora's Promise. I also have one (1) separate discussion for Green New Deal.

### **Discussions:**

I also will be doing weekly discussions. I do expect you to participate in these discussion boards. Discussions are an important component of many online classes. They replicate in-class (face-to-face) discussions, so they can be fertile ground for exploratory learning. They can also be fertile ground for self-assessment. When students are directed to consciously compare their ideas or their participation with other participants in the class, they may be able to adjust their participation (both quantity and quality) to meet the bar set by other students. A total of six (6) discussions will take place online over the course of the semester.

## **Course Grading Based on Course Objectives**

Class grading will be based on points accumulated in the following ways.

- Six (6) Exams Covering Chapters Assigned 100 points each
- One (1) Green New Deal Discussion Board 100 points
- Two (2) papers Pandora's Promise & Green New Deal. (I would like the paper to be typed, double spaced, font to be Helvetica or Ariel and 12pt) 100 points each
- Weekly Class Participation (6 weeks) 25 points each



\* Exams may include true/false, multiple choice and short answer questions. Missed quizzes and exams must be cleared with the professor to be made-up. Asking to make-up missed quizzes or exams is your responsibility and needs to be for a reasonable excuse. You have all day from 12:00AM to 11:59PM to take Exams/Quizzes. This is 24 hours so plan accordingly.

Grading: A = 100 – 90% B = 89 – 80% C = 79 – 70% D = 69 – 60% F = < 59%

### **Course Policies**

### What does it mean to "attend" an online class?

Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

- Student submission of an academic assignment
- Student submission of an exam
- Documented student interaction with class postings, such as weekly discussions.
- A posting by the student showing the student's participation in an assignment created by the instructor.

• A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters.

• An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

### Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.

### What is online netiquette?

Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.

Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

### Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

• Plagiarism is taking and presenting 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 "cite a source" correctly, you must 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 that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing 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 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) using a commercial term paper service.



## Examples of Academic Dishonesty that can occur in an online environment:

- Copying from others on a quiz, test, examination, or assignment;
- Allowing someone else to copy your answers on a quiz, test, exam, or assignment;
- Having someone else take an exam or quiz for you;

• Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others);

• Buying or using a term paper or research paper from an internet source or other company or taking any work of another, even with permission, and presenting the work as your own;

• Excessive revising or editing by others that substantially alters your final work;

• Sharing information that allows other students an advantage on an exam (such as telling a peer what to expect on a makeup exam or prepping a student for a test in another section of the same class);

• Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

### **IVC Student Resources**

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.

### **Anticipated Class Schedule/Calendar**

This schedule will be reviewed to include dates for the tests, assignments, and due dates. As the human experience is impacting the environment in positive and negative manners, and as the fifth IVC institutional learning outcome is global awareness this course will include human world events as part of the discussion. You will be expected to be aware of current world events and able to engage in discussion relevant to this fact. Amendments will be communicated in class and/or in canvas.

| Date or Week      | Activity, Assignment, and/or Topic                                    | Pages/ Due Dates/Tests            |
|-------------------|---|-----------------------------------|
| Week 1            | Module 0: Orientation   | Chapter 1 & 2: Pages 2 – 45       |
| June 20 – June 23 | Module 1 (Week 1): Chapter 1 - Science and Sustainability: An         | Exam 1: Chapters 1 & 2 – June 23  |
|                   | Introduction to Environmental Science & Chapter 2 – Earth's Physical  | Discussion: About You – June 24   |
|                   | Systems: Matter, Energy, and Geology                                  | Student Self-Evaluation – June 24 |
| Week 2            | Module 2 (Week 2): Chapter 9 - The Underpinnings of Agriculture &     | Chapter 9 & 10: Pages 208 – 267   |
| June 27 – June 30 | Chapter 10 - Making Agriculture Sustainable                           | Exam 2: Chapters 9 & 10 – June    |
|                   |   | 30                                |
|                   |   | Discussion: Environmental Issues- |
|                   |   | July 1                            |
|                   |   | Assignment: Pandora's Promise     |
|                   |   | Question – July 1                 |
|                   |   | Student Self-Evaluation – July 1  |
| Week 3            | Module 3 (Week 3): Chapter 6 - Ethics, Economics, and Sustainable     | Chapters 6 & 7: Pages 130 – 183   |
| July 5 – July 7   | Development, Chapter 7 - Environmental Policy: Making Decisions and   | Exam 3: Chapters 6 & 7 – July 7   |
| , ,               | Solving Problems & Pandora's Promise                                  | Discussion: Plastics- July 8      |
|                   | <b>3 •</b> • • • • • • • • • • • • • • • • •                          | Assignment: Pandora's Promise –   |
|                   |   | July 8                            |
|                   |   | Student Self-Evaluation - July 8  |
| Week 4            | Module 4 (Week 4): Chapter 19 – Fossil Fuels: Sources, Uses, Impacts, | Chapter 19: Pages 514 – 547       |
| July 11 - 14      | and Conservation & Chapter 21 - New Renewable Energy Alternatives     | Chapters 21: Pages 576 - 60       |



| Date or Week           | Activity, Assignment, and/or Topic   | Pages/ Due Dates/Tests   |
|------------------------|--|--|
|                        |  | Exam 4: Chapters 19 & 21 – <b>July</b><br>14   |
|                        |  | Discussion: Raw Sewage– July 15<br>Student Self-Evaluation – July 15   |
| Week 5                 | Module 5 (Week 5): Chapter 8 - Human Population, Chapter 12 -  | Chapter 8: Pages 184 – 207   |
| July 18 - 21           | Forests, Forest Management, and Protected Areas and Green New Deal   | Chapter 12: Pages 300 - 329<br>Exam 5: Chapters 8 & 12 – July 21<br>Discussion: World Population –<br>July 22<br>Discussion: Green New Deal –<br>July 22<br>Assignment: Green New Deal –<br>July 22<br>Student Self-Evaluation – July 22 |
| Week 6<br>July 25 - 28 | Module 6 (Week 6): Chapter 13 - The Urban Environment - Creating<br>Sustainable Cities & Chapter 20 - Conventional Energy Alternatives | Chapter 13: Pages 330 – 351<br>Chapter 20: Pages 548 - 575<br>Final Exam: Chapters 13 & 20 –<br>July 28<br>Discussion: It's Closing Time –<br>July 29  |
|                        |  | Student Self-Evaluation – July 29  |

\*\*\*Subject to change without prior notice\*\*\*