

Instructor: Joshua Castro, Professor of Biology

Office: Room TBD

Phone: 407-299-500

E-mail: jcastro22@valenciacollege.edu

URL: <u>http://frontdoor.valenciacollege.edu/</u>

Class Web Site: As this is a fully online course, all of your course materials are accessible through Canvas at https://online.valenciacollege.edu/login/canvas

If this is your first time taking an online course go to: <u>http://valenciacollege.edu/oit/learning-technology-services/student-resources/getting-started-online/</u> to help you logon and familiarize you with the system.

- **Course Description:** The course is an introduction to the environmental sciences that stresses a scientific approach toward understanding the nature and scope of contemporary problems in relation to natural systems. It outlines the interactions of biological, physical, chemical, geological, and sociological principles that define natural and anthropogenic ecological change.
- **Course Purpose:** To investigate environmental science and environmental systems in the context of real places, real people, real problems and real data.

Learning Objectives:

Upon successful completion of this course students will be able to:

- 1. Identify environmental principles related to natural resources and their management.
- 2. Determine and analyze human and nature's impacts to environmental systems.
- 3. Identify and describe various natural systems.
- 4. Identify and differentiate between different types of pollution sources and their environmental impacts.
- 5. Identify and differentiate between the types of regulations and remediation for environmental impacts.
- 6. Identify and describe the basic fundamental biological, chemical, and physical principles involved in how environmental systems function.
- 7. Relate current political, scientific, and economic principles to environmental issues.
- 8. Effectively analyze, evaluate, synthesize and apply information and ideas from diverse sources and disciplines.
- 9. Use processes, procedures, data, or evidence to solve problems and make effective decisions.

Textbook: We will be using *Environmental Science*, 16th edition by Miller and Spoolman. This course requires **MindTapV2.0** from Cengage. You can find this in the Valencia College bookstore or:

Purchase Direct from <u>Cengage</u> (within our Canvas course) Option 1: E-Book Access

Option 2: E-Book Access AND Loose Leaf Textbook

Option 3: Cengage Unlimited. If any of your other professors use a Cengage book this semester, this will be your most cost



effective option. For \$125, you will have access to all of your Cengage eBooks and online accounts for 4 months. You can rent the hardcopy for an additional \$9.99.

Short on cash for a couple of weeks? You can do a 2-week trial with to get started. Click on "Start my Free Trial." *IMPORTANT: You MUST purchase the textbook through one of these options to receive MindTapV2.0 Access. MindTap activities are worth a significant part of your grade. If you purchase/rent your textbook through another source, you may not receive a valid MindTap code and will not be able to complete the activities. Your grade will suffer as a result.* Here is a video on how to login and register. You can also access MindTapV2.0 through a mobile app. Here is the <u>user guide</u> for that.

Course Schedule		
Week	<u>Topic & Assignments</u>	Due Dates
1 Jan 8-Jan 14	 Orientation Module: Orientation Quiz, Be in the Know Assignment Introduction Discussion – Let's Break Ice! and 2 replies Quiz: Plagiarism 101 Brushing up on the Basics: MindTap Graphing and Data Interpretation, An Introduction to Science Process 	Sun, Jan 14
2 Jan 15-Jan 21	 Read Chapter 1: The Environment and Sustainability Video Quizzes: Introduction to Environmental Science, Human Population Impacts Discussion: Scientific Argumentation of Environmental Issues MindTap Activities: Case Study and Chapter activities Authentic Assessment: Ecological Footprint 	Sun, Jan 21
3 Jan 22-Jan 28	 Read Chapter 3: Ecosystems: What are they and how do they work? Video Quizzes: Ecosystem Ecology, Energy Flow in Ecosystems, Biogeochemical Cycles Discussion: Florida's Algae Blooms MindTap Activities: Case Study and Chapter activities Authentic Assessment: Your Species, Your Choice 	Sun, Jan 28
4 Jan 29-Feb 4	 Read Chapter 4: Biodiversity and Evolution Video Quizzes: Ecosystem Diversity Discussion: Evolution and Religion MindTap Activities: Case Study and Chapter activities Authentic Assessment: Rat Island Activity 	Sun, Feb 4
5 Feb 5-Feb 11	 Read Chapter 5: Species Interactions, Succession, and Populations Overview Video Quizzes: Natural Ecosystem Change, Population Ecology Discussion: How Wolves Change Rivers MindTap Activities: Case Study and Chapter activities Authentic Assessment: Your Species, Your Choice Part 2 	Sun, Feb 11
6 Feb 12-Feb 18	 Read Chapter 6: Human Population and Urbanization Overview Video Quizzes: Human Population Dynamics, Human Population Size, Land Use Discussion: Human Population Growth MindTap Activities: Case Study and Chapter activities Authentic Assessment: Human Population 	Sun, Feb 18
7 Feb 19-Feb 25	 Read Chapter 8: Saving Species Video Quizzes: Loss of Biodiversity Discussion: To Live or Not to Live MindTap Activities: Case Study and Chapter activities Authentic Assessment: Public Service Announcement for Endangered Species 	Sun, Feb 25
8 Feb 26-Mar 3	 Read Chapter 9: Saving Ecosystems Video Quizzes: Forestry and Rangelands, Fishing Discussion: Timber Debate MindTap Activities: Case Study and Chapter activities Authentic Assessment: Human Impact on the Environment 	Sun, Mar 3

Course Schedule			
<u>Week</u>	<u>Topic & Assignments</u>	Due Dates	
9 Mar 4-Mar 10	 Read Chapter 10: Food Production and the Environment Video Quizzes: Agriculture Discussion: Traditional vs Organic Production MindTap Activities: Case Study and Chapter activities Authentic Assessment: Importance of Community Gardens 	Sun, Mar 10	
10 Mar 11-Mar 17	 Read Chapter 11: Water Resources and Water Pollution Video Quizzes: Water Resources, Water Pollution Discussion: Water: A Right or a Commodity? MindTap Activities: Case Study and Chapter activities Authentic Assessment: Your Drinking Water 	Sun, Mar 17	
11 Mar 18-Mar 24	Spring Break		
12 Mar 25-Mar 31	 Read Chapter 13: Energy Resources Video Quizzes: Fossil Fuel Resources, Nuclear Energy, Energy Reduction, Renewable Energy, Hydroelectric Power Discussion: Energy Future MindTap Activities: Case Study and Chapter activities Authentic Assessment: Energy Efficiency 	Sun, Mar 31	
13 Apr 1-Apr 7	 Read Chapter 15: Air Pollution Video Quizzes: Atmosphere, Air Pollution Discussion: Clear Air - Whose Responsibility is It? MindTap Activities: Chapter activities (no case study) Authentic Assessment: Air Pollutant Research 	Sun, Apr 7	
14 Apr 8-Apr 14	 Read Chapter 15: Climate Change and Ozone Depletion Video Quizzes: Global Climate Change, Stratospheric Ozone Discussion: Climate Change MindTap Activities: Case Study and Chapter activities Authentic Assessment: Climate Change Wedges 	Sun, Apr 14	
15 Apr 15-Apr 21	 Discussion: Science Argumentation of Environmental Issues, Revisited Final Project: Understanding Global Change 	Sun, Apr 21	
16 Apr 22-Apr 24	Late submission of Final Project		

*The dates of these topics and assignments serve as a guideline and are subject to change.

Other important dates:

- Jan 16 (@ 11:59pm) Drop/Refund Deadline
- Mar 15 (@ 11:59pm) Withdrawal deadline
- Mar 13 through Apr 17 Student Feedback on Instruction period
- Mar 18-24 Spring Break (college closed)
- Apr 28 Term ends
- Apr 30 Final grades viewable in ATLAS

Expectations

Teacher Expectations

I believe that anyone can succeed in the class if the right learning environment and strategies are used. I have structured this course to provide a variety of learning assessments with diverse learners in mind. I value your uniqueness and experience and want you to value your classmates as well. We are all learning together so please reach out to me if you have any questions or need extra assistance. I am here to help you learn. ©

- I will follow the course outline as closely as possible and will notify you of modifications in the outline if they happen.
- I will attempt to create and maintain an online atmosphere in which you feel free to both read others' views and express your own views and ask questions to increase your learning.
- Please email me about anything which you are unclear. I tend to respond quickly and I want to be supportive of your learning and growth.

Student Expectations

Set goals for yourself for this course and plan/work to meet them. Meet all course deadlines and you will receive feedback within a week on the submitted assignment. Value your classmate's opinions and be open to learn new ways of thinking. Complete all assignments, quizzes, and exams without sharing/copying other's work or answers and be proud of your work.

- Please inform me by phone or e-mail if you will be unable to complete work.
- You are expected to complete assignments thoroughly and on time and contribute to class discussions.
- You are expected to check your Atlas email and Canvas inbox on a regular basis throughout the week.
- Since this is an online class, all of it is spent at the comfort of a computer, you can expect to devote **3-6 hours** each week to this course. I recommend scheduling a couple of days a week working on the assignments. Start them early so you can ask questions.
- Feel free to share feedback regarding how well the class is meeting your needs or if material is unclear. I make changes to the class based on feedback.
- It is also expected that you will treat classmates online with respect and observe the rules of netiquette and confidentiality regarding personal information shared in class.

Assessment Method and Evaluation Scale

Authentic Assessments: An authentic assignment is one that requires application of what you have learned to a new situation, and demands judgment to determine what information and skills are relevant and how they should be used. Individual authentic assessments will be assigned to demonstrate an understanding of the material. The products may include developing PowerPoints, videos, infographics, papers, etc. A rubric will be provided for grading the assignment.

Final Project: As a culmination of the class, the final project will require you to annotate interactions between categories for three environmental topics. PowerPoint presentations will be exported from the interactive activity and combined into one final product. Additionally, you will reflect on your thoughts about the most important environmental topic to you.

Video Quizzes: I am using an excellent video series by Paul Andersen to supplement the reading and activities. There are between one and four videos per unit with questions about the videos that will be graded.

MindTap Activities: There are associated case studies and activities associated with the book. You will have links that will direct you to the activities in Canvas. You will have multiple chances to increase your score.

Discussions: Since environmental science often includes conflicting viewpoints and ways that you can act to improve the environment, weekly online discussions will be included in the course. Online discussions will be open for two weeks following the chapter covered. The student must make an initial response (3 pts) then respond to at least two other students (2 pts).

Discussion postings should be:

- Substantial Thoughtful, original, relevant and contributes to the overall learning of the group.
- Thought-provoking Stimulates thinking and reasoning.
- Timely Post early to give your peers time to respond, this contributes to a rich discussion.
- Logical, concise, and grammatical.
- Convey "your presence" Reinforce your conclusions with real life experiences.

Extra Credit: Students have the opportunity to earn extra credit by completing the Student Feedback at the end of the semester.

Late Work/Makeup Policy

There is a two-week grace period after assignments are due before they close permanently. The late penalty on Canvas assignments (quizzes, discussions, and authentic assessments) is 5% per day (up to 50%). For MindTap assignments, it is a total of 10% off each assignment if you submit your assignment during this grace period. If you cannot complete the work due to a documented absence, contact me immediately. **Late work after the grace period will not be accepted!**

Grading Scale

A = 89.5% - 100%, B = 79.5% - 89.49%, C = 69.5% - 79.49%, D = 59.5% - 69.49%, F = below 59.49%

- 1. Authentic Assessments 40%
- 2. Final Project 10%
- 3. Video Quizzes 15%
- 4. MindTap Activities 20%
- 5. Discussions 15%

College & Course Policies

No Show Policy

If you do not log into the course during the first week and complete the Orientation Quiz, you will be withdrawn from the class as a "no show". Class attendance is required for online classes; students who are not actively participating in an online class and/or do not submit the required attendance activity or assignment by the scheduled due date must be withdrawn by the instructor at the end of the first week as a "no show". If you are withdrawn as a "no show," you will be financially responsible for the class and a final grade of "WN" will appear on your transcript for the course.

Attendance Policy

This is an online course, available 24/7, managed through Canvas. You must have access to the Internet (available via loaned laptops on all Valencia campuses) to complete the course requirements. Your online attendance will be checked based on your participation in the course and submission of coursework. In the event of an extended absence, you should contact me via email or phone as soon as possible to indicate the reason.

Withdrawal

The deadline for Drop/Refund is **January 16** and for Withdrawal is **March 15**. Per Valencia policy a student who withdraws from class before the established deadline for a particular term will receive a grade of "W". A student is not permitted to withdraw after the withdrawal deadline.

A faculty member will withdraw a student up to the withdrawal deadline for violation of the class attendance policy. A student who is withdrawn by faculty for violation of the class attendance policy will receive a grade of "W". After the withdrawal deadline, faculty will not withdraw a student and the student will receive the grade earned at the end of the course. Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of "F." If you do not intend to complete the course, you must withdraw yourself prior to the withdrawal date.

Academic Honesty

All forms of academic dishonesty are prohibited at Valencia College. Academic dishonesty includes, but is not limited to, acts or attempted acts of plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, facilitating academic dishonesty, and misuse of identification with intent to defraud or deceive.

All work submitted by students is expected to be the result of the students' individual thoughts, research, and self-expression. Whenever a student uses ideas, wording, or organization from another source, the source shall be appropriately acknowledged. If a student is caught submitting plagiarized work, a first offense will result in a zero score on the assignment, a second offense will result a class grade of F.

College Student Conduct Policy

Valencia is dedicated not only to the advancement of knowledge and learning but also to the development of responsible personal and social conduct. As a registered student, you assume the responsibility for conducting yourself in a manner that contributes positively to Valencia's learning community and that does not impair, interfere with, or obstruct the orderly conduct, processes, and functions of the college as described in the Student Code of Conduct.

Netiquette

It is important to be aware of your behavior in an online learning environment to ensure positive interactions with your instructor and peers. This requires you to follow some guidelines for behaviors.

All students are expected to:

- Show respect for the instructor and for other students in the course
- Respect the privacy of other students
- Express differences of opinion in a polite and rational way
- Maintain an environment of constructive criticism when commenting on the work of other
- students
- Remain focused on the learning topics during discussions and activities

Third Party Software & FERPA Policy

Valencia College has a firm commitment to protecting the privacy rights of its students. Under no circumstances will your test scores, total points, or final grades be discussed on the telephone or over email. FERPA rights to privacy prevent the divulging of scores or related materials by these means. Scores will only be given face-to-face with each student or by accessing your ATLAS account.

Communication

You may contact me in various ways during this semester.

- You may contact me through the Canvas Inbox. This is probably the best and quickest method of communication. I will respond to your message within 48 hours, often much sooner, with the exception of days and times when the college is closed.
- You may email me at <u>jcastro22@valenciacollege.edu</u>. In your messages (if not using the Canvas Inbox), please indicate your course number so that I may better assist you.

Digital Device Requirements

You should verify computer software and hardware requirements to ensure course work can be submitted successfully. Since all assignments are submitted online, access to a digital device is required for this course.

Canvas list minimum computer specifications and supported browsers to ensure compatibility. The Chrome browser is recommended. You are also encouraged to install the Canvas app on their Android phone or iPhone in order to receive mobile notifications and to access your courses via your mobile device.

Notifications

Make sure that you turn on your Push Notifications and click on the "checkmark" for Announcements and Submission Comments to ensure that you receive those immediately. It only needs to be changed on one device. Add a profile pic to Canvas for a personal touch.

Student Support Services

Student Assistance Program

Valencia College has contracted with a private and confidential counseling service (Bay Care Behavioral Health Student Assistance Program (SAP)) to provide FREE short-term assistance to students who need to resolve problems that are affecting their college performance. Examples might include stress, relationship/family issues, alcohol/drug problems, eating disorders, depression, and gender issues. If you are experiencing any of these issues, call 1-800-878-5470 to speak to a professional counselor. For more information, log into Atlas, click on the "Students" tab, and click on "BayCare Health System," located under "Health and Wellness."

Students Requiring Academic Accommodations

Students with disabilities who qualify for academic accommodations must provide a letter from the Office for Students with Disabilities (OSD) and discuss specific needs with me, preferably during the first two weeks of the semester. The OSD (West Campus SSB 102, ext. 1523) determines accommodations based on appropriate documentation of disabilities.

Title IX

Valencia College strives to be a place free from all forms of discrimination. Title IX protects students from discrimination based upon sex including protections against sexual violence, domestic violence, and stalking. This also includes protections for students who are pregnant or may become pregnant. If you experience sexual violence, domestic violence or stalking and would like assistance there are several options available to you. Valencia partners with the Victim Service Center of Central Florida which is a confidential resource available 24/7. They can be reached by calling 407-497-6701. If you would like assistance on campus, you can go to the website or contact Valencia College's Title IX and Equal Opportunity Officer, Ryan Kane, by emailing rkane8@valenciacollege.edu. If you would like to report to law enforcement, you may visit Campus Security or call 911.

Please note that there are no confidential resources on campus. As your professor, I am required to report any information mentioned in this statement to the appropriate campus resources. This will include your name and detailed information shared with me. We take privacy very seriously at the College and only those who have a legitimate need to know the information will be provided with this information.

Copyright

To avoid copyright infringement, any materials produced specifically for this class can ONLY be used during this term for this class.

Disclaimer

Changes in the syllabus, schedule, evaluation procedures, and/or homework assignments may be made at any time at the discretion of the professor. If you are absent, it is your responsibility to find out what, if any, announcements or changes have been made.