

De Anza College
ESCI01-51Z/52Z - Environmental Science, Fall 2021

Call (CRN) 24827/23135 4.0 Units

100% Online Course

Zero Materials Cost

September 20 – December 6, 2021

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| Instructor: | Mary Poffenroth, M.S. |
| Office Location: | Online via Zoom |
| Division/Dept: | Biological, Health & Environmental Sciences: ES Dept. |
| Email: | <u>poffenrothmary@fhda.edu</u> It is best to email me any questions or concerns. For email, I will respond within 48 business hours . Please do not expect a response late at night or on weekends. Your email must be in grammatically correct English, with proper salutations, in order to receive a response. If you do not receive a response, please send an email to my personal address at <u>mpoffenroth@gmail.com</u> |
| Office Hours: | Mondays 10 am to 12 pm Online or by appointment. |
| Days/Times/Classroom: | Lecture 100% Online in Canvas. This course is asynchronous lecture only. There is no zoom meetings. ESCi1 Lab is a separate course. |
| GE Fulfillment: | Area 5B / B2 for CSU/UC Transferable Credit |
| Online Orientation: | <u>https://foothillcollege.instructure.com/courses/62</u> |

About the Instructor

As a first generation college student myself, I understand the unique challenges of attending college. Over the last ten years, I have constantly adjusted and updated my courses to help reflect the changing technology and the ever evolving student. You will find my courses full of different ways to keep you engaged and prepare you for future success. Many of my students go on to see me again in the biology department at San Jose State University, or secure other four year degrees and many lucrative jobs both within and beyond working with the environment. I take student feedback seriously and work to help you find the balance between a good challenge that will keep you interested and reaching your goals. If you want to learn more about my work in speaking, writing, and publishing – you can check out my portfolio website, <https://www.marypoffenroth.com>

Canvas <https://deanza.instructure.com>

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas deanza.instructure.com **You are responsible for regularly checking with the messaging system through Canvas and your email listed with De Anza to learn any updates.** If you have any issues accessing Canvas, you must address these directly with the De Anza HelpDesk – I do not have that level of access to assist you <https://deanza.instructure.com>

Need access to technology? The SRC at the Kirsch Center can help! 2nd Floor.

Class Delivery Mode: This course is delivered online through Canvas (<https://deanza.instructure.com>). Success in the course requires active participation by logging in multiple times a week for updates, to complete assignments, take quizzes, review lectures and participate in discussions. Check out What Makes a Successful Online Student? <http://www.ion.uillinois.edu/resources/tutorials/pedagogy/studentprofile.asp>

Do not submit your assignments via a smartphone. You should always use a laptop or desktop computer to perform your work. We do a lot of online/web based work in this class. Please make sure you have **reliable wifi** and up to date AntiVirus software. Late assignments will not be accepted because of poor internet connection.

This class is not self-paced. But you do have at least one week to submit each unit's assignments any time before the deadline. There is no on-campus requirement. You will have deadlines and they will not be adjusted unless there is an issue that affects the entire class. Online classes, although more convenient for lecture attendance than in-person, are still as rigorous. If you cannot meet the demands and timing of the course, as set forth in the schedule below, please consider taking a different course. **There are no makeups for missed assignments/classes.**

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor-generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

Course Description *Lecture is fully online and 100% asynchronous*

An introduction to environmental science as a branch of the sciences and its relation to the scientific field including the scientific method. Review of the principles, concepts and terminology of the environmental sciences and ecological literacy including restoration ecology, landscape ecology, sustainable studies and ecosystem management. Agenda 21 and other environmental indicator tools as they relate to human use of the earth's systems including the hydrosphere, atmosphere, lithosphere and biosphere and the impact on cultural, ethnic and gender groups will be explored.

Please see the schedule at the end of this syllabus. It will have the dates by which the lectures will be available online within our Canvas website. Please note that lectures/activities may be available sooner than the date listed, but not later. **The exam dates are firm.** Since you may complete homework assignments any time before the deadline, absolutely no late homework will be accepted. For all electronic assignments, do not wait until the last minute to submit. No extensions will be given for user error or unreliable Internet connections.

Technology Requirements: This is a technology heavy class since it is in the online environment. You must have a computer that has the most up to date operating system, Microsoft office, up to date web browser and associated media players, a webcam, microphone and earphone capabilities. There are computers available on campus, but you will need to search this resource out for yourself if needed.

You must also have the necessary system requirements to smoothly run Canvas. It is your responsibility in an online class to ensure you have the proper technology to view the online curriculum. I cannot provide tech support for your system or software. If you find a video or something is not playing properly, try a different web browser (i.e. instead of safari try to play it in FireFox or Chrome). This usually solves the issue.

You are automatically registered with Canvas as a registered student of the course. Only registered students can access our Canvas class. I will also be sending out emails through MyPortal periodically. Please ensure you are reading/receiving them.

Student Learning Objectives

Student Learning Outcome Statements (SLO)

Utilize the scientific method to demonstrate role of scientist and public to analyze the consequences of human actions on the physical, biological, and cultural world.

II. Course Objectives

Examine Earth Systems and Resources.

Examine the living world.

Assess the relationship between population and environmental science.

Examine land and water use

Assess energy resources and consumption.

Examine environmental pollution

Examine global climate change.

Course Topic Goals

Science is a continuous and adaptive process through which we discover and communicate how the natural world works, separate facts from inference, and establish testable hypotheses. All students should master essential quantitative and qualitative skills that are necessary to understand scientific knowledge and methods in order to incorporate these processes into professional and everyday life experiences.

After completing this course you should be able to:

1. Examine environmental studies as a newly emerging field of study and its relation to the scientific field and other disciplines.
2. Assess and apply environmental and ecological concepts to modern life and a technologically based society.
3. Assess and explore the career opportunities in the environmental studies field.
4. Analyze the history of human use and exploitation of the earth's natural resources.
5. Examine the relationship between resource degradation and the changing role of humans in society.
6. Compare and contrast the history of land use ethics in Western versus non-Western cultures.
7. Explore the impact of the industrial revolution and other technological advances on the human relationship with nature.
8. Evaluate the effects of the conservation movement in the United States.
9. Assess the political system within the United States and its relationship to environmental degradation.
10. Analyze how ethics, politics and the current economic system within the United States has influenced environmental policies and regulation.
11. Assess the relationship between environmental degradation and the cycle of poverty.
12. Examine and describe the world's natural resources including air (the atmosphere), water (the hydrosphere), soil (the lithosphere) and species (the biosphere).
13. Assess and debate the current state of the world's natural resources and the impacts on human populations.
14. Analyze and explore possible solutions to the current state of the world's resources.

Optional Textbook / Materials

If you wish to use a textbook, the free of charge OpenStax Biology, 2nd Edition. Clark, Choi, and Douglas (2018). ISBN-10: 1-947172-51-4 is a great choice.

This book can be accessed in full, free of charge at: <https://openstax.org/details/books/biology-2e>

Course Requirements and Assignments

De Anza classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. This is a standard set by De Anza College.

Course Point Breakdown

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|---|-------------------------|
| 1. Final Exam | 100 |
| 2. Weekly Lecture Activities (Online, Submitted to Canvas) <i>up to</i> | 300 |
| 3. Digital Environmental Presentation | 100 |
| 4. Summary of Fellow Student's Presentations (10 @ 2.5 pts each) | 25 |
| Total Points for Quarter | <i>Up to</i> 525 |

Final Exam

- Style: multiple choice, short answer and/or essay
- It will be timed at 90 minutes and the clock begins once you press start
- You may only take it once
- It is open note, open internet
- You may take the exam anytime on the scheduled date between the hours of 12:01 am and must be finished before 11:59 pm PST
- You must prepare for your exam, however, no study guide is provided. Preparation should consist of having your notes from each module in easy to find order. Do not rely solely on your notes to answer questions, you will run out of time and will not complete the exam. Any questions not answered will receive a zero. You will only get credit for those questions you answer correctly.
- If you miss the final exam you will have 12 hours to contact me to arrange next steps. After 12 hours past the deadline of the exam, your final exam score will be a zero.

3. Weekly Lecture Activities will be submitted to Canvas which uses Turnitin.com technology: Turnitin.com is a website that checks for plagiarism and allows for online grading by the instructor. No hard copies are needed in class for assignments. Ensure you post your assignment to the correct folder within turnitin.com. No late assignments will be accepted and you can submit your assignment any time before the due date.

Turnitin.com is also a software program that allows your papers to be graded online and will scan all publications to check for how much your paper matches other sources, including other student's papers. Since I can see exactly which parts of your paper are similar to a resource, I make the final determination whether or not I feel plagiarism has occurred. It is of the utmost importance that you do all your own work. **Do not submit anything that is not your own writing, it will be caught and you will be held accountable.**

4. Digital Environmental Presentation (100 points): More information on the handout in Canvas. You will be using your book, Write, Present, Create: Science Communication for Undergraduates on this assignment. You will create a 10 minute presentation, using a slide deck, and present your work in a video. This can be a screen cast or digital recording. You will upload this for grading by me. If, for any reason, you have issues with this, please contact me immediately.

5. Summary of Fellow Student Presentations (25 Points)

You will post a public URL to the discussion board for your own presentation. Then return to this board and watch any 10 of your fellow student's presentations. In a word document, number and label each presentation with the presenters name and topic. Then summarize their presentation and give 3 specific ideas/information from the presentation that you did not know before. Finally, give one positive and one negative comment regarding the style/quality of their presentation style/design/delivery. Submit this to the submission folder before the deadline.

If you do not submit your own URL to the posting board you will have 5 points deducted from your presentation score.

Course Grade: The percentage earned out of **520** points determines the semester grade – Grades will NOT be Curved. You will have one week from the posting of each grade update to address any concerns/mistakes with your instructor. After this one week, grades will become permanent and unchangeable. It is YOUR responsibility to ensure your grade is correct weekly. Incorrect grade change requests at the end of the semester will absolutely not be honored. **The master grade book will be housed securely in your Canvas account for all assignments.**

Grade Discrepancies: If you notice a grade discrepancy on grade updates posted on Canvas , you have exactly two weeks from that posting to contact me to resolve any issue. After that, your score will become permanent.

Letter grades (with +/-) will be determined using the following scale (standard rounding rules apply where .1-.49 is rounded down, .5-.99 is rounded up):

| % | % | % |
|---------------|------------|------------|
| A+ = 98 - 100 | | |
| A = 92-97 | B- = 80-81 | D+ = 60-67 |
| A- = 90-91 | C+ = 78-79 | D = 57-59 |
| B+ = 88-89 | C = 68-77 | D- = 54-56 |
| B = 82-87 | | F = < 53.9 |

Late Assignments

If there is a documented emergency that prevents you from submitting your work, contact me immediately via email with the details of your emergency and we will go from there.

Incompletes

Incompletes are permitted only if a student is in good standing (has a passing grade), has completed at least two-thirds of the course, and has a verifiable serious and compelling reason to take an incomplete. An incomplete is not given due to poor performance.

Email: Email will only be answered Monday–Friday with additional hours on the weekend before exams.

Email etiquette: Remember your audience. It is fine to write in “txt” to your friends, but not to your professors. Please use language and salutations that are becoming of a successful The College student.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Students are responsible for dropping themselves before deadlines set forth by De Anza College.

Academic integrity

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) will result in a failing grade and sanctions by the College. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note it requires approval of instructors.

You are responsible for knowing the College Policy on Academic Dishonesty outlined in the College Catalog. Any student found plagiarizing *any* essay or assignment in ESCI191 will receive an automatic failing grade (F) on the essay or assignment, may receive a failing grade in ESCI191 and will be referred to the Judicial Affairs office. Plagiarism includes copying phrases, sentences, key words, parts or all of another’s writing, including papers or articles published on the Internet, newspapers, magazines, books, journals, or any other medium, including the writing of your fellow students from current and/or previous classes. All phrases, key words, sentences, or larger sections of writings taken from an outside source and used in a student’s paper should be appropriately reworded by the student AND cited. Drawing as few as five consecutive words from another’s writings will be considered

plagiarism, as can improper paraphrasing. All ideas or concepts drawn from another's work should be properly cited. NOTE: A student who shows or lends to their classmates their own work is at risk of being an accessory to plagiarism and, if their work is copied, will suffer the same consequences as the student who plagiarizes (see section 1.1.6 of the Definition of Academic Dishonesty). **This policy also applies to students in previous courses who show or lend their work to current students.**

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with De Anza's policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Accessible Education Center (formerly the DRC).

Campus Policy on Consent for Recording and Sharing of Instructor Materials

Common courtesy and professional standards dictate that you notify someone when you are recording him/her. You must obtain the instructor's (or guest speaker's) permission to make audio or video recordings in this class. All recordings are the intellectual property of the instructor (or guest speaker); you have not been given any rights to reproduce or distribute the material. Course materials developed by the instructor (or guest speaker) are the intellectual property of the instructor (or guest speaker), as well, and cannot be shared publicly without his/her written approval. Overall, you may not publicly share or upload instructor-generated material for this course such as exam questions, lecture notes, or homework solutions without formal instructor consent. Such permission allows the recordings and materials to be used for your private study purposes only.

Schedule

Plan to complete and submit assignments every week. Assignments and lectures will be posted no later than Sunday evening of each workweek.

Lecture material will be delivered via lecture videos. Lecture video material will make up the bulk of the exam questions. If you do not watch the lecture videos and take good notes, you will not do well on the timed exams.

ESci01 – Online Lecture Schedule

This schedule starts slow by design. You can complete and submit all of your assignments before the due dates. The end of the quarter is heavy on deliverables, so make sure you plan ahead. Lecture videos and Canvas assignments will become visible by the Sunday before each Monday every week.

| Module # | Topics | Special Due Dates/Reading/Notes | Canvas Lecture Work Due By 11:59 pm PST Fridays |
|----------|---|--|---|
| 0 | Introduction to the course | Welcome Week – make sure to submit your roll call assignment to secure your space in class | Sep 22 |
| 1 | The Environment and Human Health | | Sep 24 |
| 2 | Environmental Ethics, Economics, and Policy | Review OpenStax: Chapter 1: The Science of Life | Oct 1 |
| 3 | Environment, Sustainability, and Science The Physical Science of the Environment | Review OpenStax: Chapter 2 – The Chemical Foundation of Life | Oct 8 |
| 4 | Organism and Population Ecology and Evolution Communities and Ecosystems | Review OpenStax: Chapter 18– Evolution and Chapter 19 – The Evolution of Populations | Oct 15 |
| 5 | Geography of Life/Finish Ecosystems | Review OpenStax: Chapter 45 – Population & Community Ecology | Oct 22 |

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| 6 | Biodiversity Conservation Forest Resources | Review OpenStax: Chapter 47: Conservation and Biodiversity | Oct 29 |
| 7 | Air Quality Water Agriculture and the Ecology of Food | Review OpenStax: Chapter 46: Ecosystems | Nov 5 |
| 8 | Climate Change and Global Warming Human Population Growth | Review OpenStax: Chapter 44 – Ecology & The Biosphere | Nov 12 |
| 9 | Urban Ecosystems Waste | Digital Presentations Due to Canvas | Nov 19 |
| | Thanksgiving Break Nothing Due | | Nov 22-26 |
| 10 | Becoming an agent of change. Activism, civic engagement and future opportunities for you. | Presentation Summaries Due | Dec 3 |
| Final Day | Final Exam: in Canvas. Start and finish the exam between 12:01 am – 11:59 | Extra Credit Due | Dec 6 |