

GES 470 Application of Environmental Sustainability

Course Information

- **Class meeting:** Tuesdays and Thursdays from 12:30 until 1:45 p.m. MT in Eddy Hall Room 118
- **Credits:** 3
- **Instructor:** Renée Harmon, Ph.D.
- **Email:** renee.harmon@colostate.edu
- **Office Hours:** by appointment via Zoom
- **Required Writing Style:** This course uses APA7 Formatting Style

Course Description

In this course, we will integrate and apply the foundations of environmental sustainability (the environmental, social, and economic dimensions) to achieve a holistic understanding of environmental issues, practices, and problem-solving. These three dimensions will serve as the sustainability foundations for the course.

Students will learn and apply tools for assessing environmental issues and best practices for working in interdisciplinary teams.

Case studies demonstrating sustainability principles will be evaluated through discussion and writing, and students will conduct a team project that addresses and dissects an important issue related to global environmental sustainability.

General Course Objectives & Outcomes

At a level of proficiency appropriate for junior & senior-level undergraduates, students will be able to:

- demonstrate the ability to integrate and synthesize the primary dimensions of sustainability and resilience to modern challenges in sustainability.
- apply knowledge of foundational work on sustainability, including concepts and metrics of sustainability to current global sustainability challenges.
- illustrate “systems thinking” through participation in and leadership of discussions, writing, group work, and oral presentations that address issues of sustainability.
- construct outcome scenarios on environmental systems using problem-solving techniques.

- analyze a variety of viewpoints surrounding selected global sustainability issues and develop a well-supported position on each issue.
- exhibit the ability to work in multidisciplinary groups to develop sustainable solutions to a difficult problem facing the planet.

Course Requirements

- To access course materials, you must have access to computer hardware and software that meets the standards for Canvas usage.

Required Text

- Meadows, D.H. (2008). *Thinking in systems: A primer*. Chelsea Green Publishing.
- Jackson, R. (2024). *Into the clear blue sky*. Scribner.
- Bloomberg, M. and Pope, C. (2017). *Climate of hope: How cities, businesses, and citizens can save the planet*. St. Martin's Press.

Optional Text

- Dunnivant, F. M. (2017). *Environmental success stories: Solving major ecological problems and confronting climate change*. Columbia University Press.

Additional Reading Materials provided and available in Canvas.

Methods of Instruction

This course will provide students with the information and skills needed to understand environmental problems' complexities and work effectively towards solving them. It will be organized into four sections as follows:

- Definitions, theories, and models of sustainability
- Applying the sustainability framework to environmental problems
- An in-depth exploration of local problems and global issues is presented as case studies. These will highlight the complexities and implications of human decisions on the landscape at various scales.
- Practitioners/ guest speakers in various fields
- Developing individual case studies
- Student teams will demonstrate how to dissect environmental problems by creating and leading the examination of case studies for the class.

Students are responsible for regularly reviewing the course schedule and completing all required assignments.

Course Participation

- Regular, active, and meaningful participation in learning activities is an important component of this course and essential to your success.

Participation includes

- Active participation is expected of all students in this course.
- Check Canvas Announcements and messaging regularly. Ask questions.

Grading

Grading Scale

Grades	Percentage
Grade = A	90-100+%
Grade = B	80-89%
Grade = C	70-79%
Grade = D	60-69%
Grade = F	59% and below

How your Grade will be Determined

Graded Activities

Assessment	Grades points on each assignment	Total Points	Percent of Final Grade
Sustainability Quiz (2)	50	100	10%

Homework Activities (10)	25	250	25%
Debate Fact Sheet (1)	50	50	5%
Debate Views (2 - Affirming and Opposing)	50	100	10%
Population Quiz (1)	40	40	4%
Semester Project First Draft (1)	30	30	3%
Semester Project Peer Review (1)	30	30	3%
Semester Project Final Report (1)	150	150	15%
Semester Project Presentation (1)	100	100	10%
Final Exam OR Professional Sustainability Portfolio OR Shift FOCO reflection OR Lifestyle project (1)	100	100	10%
Reflection Discussion (1)	50	50	5%
Total		1000	100%

Pedagogical Approach

This course provides students with the information and skills needed to understand the comprehensiveness of sustainability, the myriad of environmental and social conditions that sustainability can address, and how to collaborate for sustainable solutions.

As an instructor, I follow a *mastery* teaching and learning approach. I provide opportunities for students to revise assignments to improve grades. I encourage students to reach out to me if additional instruction on any topic covered/assignment in this course is needed.

Extra Credit

There are three extra credit opportunities:

- Attend CSU International Symposium and write an abstract summarizing the experience. Virtual attendance is an option. (25 points)
- Attend a CSU Africa Center Coffee Social or other CSU Africa Center event and write an abstract summarizing the experience. Must attend in-person. (25 points)
- The final exam has a third question that is extra credit. (10 points)

Policies & Resources

Late Work Policy

Late work is accepted within a reasonable timeframe; please email the instructor to discuss.

Grading Concerns & Questions

Contact the instructor via email to ask questions or discuss concerns about grading.

CSU Principles of Community

- **Inclusion:** We create and nurture inclusive environments and welcome, value, and affirm community members, including their various identities, skills, ideas, talents, and contributions.
- **Integrity:** We are accountable for our actions and will act ethically and honestly in all our interactions.
- **Respect:** We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.
- **Service:** We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.
- **Social Justice:** We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies, and procedures that promote justice in all respects.

Netiquette

[Ground Rules for Online Discussions.](#)

Syllabus Resources and Policies

Please visit [Syllabus Resources and Policies](#)Links to an external site. to learn about more policies relevant to your courses and resources to help with various challenges you may encounter.

COVID Information & Resources

For information about COVID-19, please refer to [Covid Information & Resources](#)Links to an external site..

Student Accommodations

Report an access barrier through the [CSU Student Disability Center](#)Links to an external site..

Mental Health and Wellness

CSU is a community that cares. You are not alone. CSU Health Network Counseling Services has trained professionals who can help. Your student fees provide access to a wide range of support services.

Call Counseling Services at (970) 491-6053, and they will work together to determine which services are right for you.

- [CSU counseling services](#)Links to an external site.
- [Student mental health and well-being resources](#)Links to an external site.

If you are concerned about a friend or peer, use **Tell Someone** by calling (970) 491-1350 or visiting <https://supportandsafety.colostate.edu/tell-someone/>Links to an external site. to share your concerns with a professional who can discreetly connect the distressed individual with the proper resources.

Rams Take Care of Rams. Ask for help if you or someone you know is struggling.

Academic Integrity and Honor Code

Students must follow CSU [Academic Honesty and Integrity](#)Links to an external site. policies and avoid [Academic Misconduct](#)Links to an external site..

Review [Student Academic Integrity Resources](#)Links to an external site..

As students of CSU, you are held to a high standard of integrity. The university developed a Student Honor Code that all students need to adhere to:

- ***"I have not given, received, or used any unauthorized assistance."***

- CSU students are held accountable for academic misconduct.

Violations include, but are not limited to:

- Cheating
- Plagiarism
- Falsification
- Unauthorized possession or disposition of academic materials
- Facilitation of academic misconduct for others

Any act of academic dishonesty will result in one or more actions determined by the instructor, which

Changes to the Syllabus

The syllabus is subject to change based on need, and the instructor will communicate any changes with students through Canvas Announcements.

- The instructor reserves the right to make changes to this syllabus

Critical Event Procedure

- In the event of a school closing due to weather or other major events that might impact class schedules, the instructor will post an announcement indicating what changes, if any, the event will have on the course schedule and due dates.

Copyright

- The materials used in this course may be protected by copyright and are only for the use of students enrolled in this course for the purposes associated with this course and may not be retained or further disseminated.

Student Success Tips

- To succeed in this course, you must be organized and manage your time well to complete all assessments on time. Ensure that you do not allow yourself to procrastinate and that you communicate with the instructor or your classmates if you have any questions on any course materials or need assistance completing any assignments.

How to Approach Readings

- Analyze the readings to gain a deeper understanding of difficult concepts, examples, the author's position, and the author's arguments.
- Critique the readings, articulating and defending personal opinions about the adequacy of the author's presentation and arguments.

- Connect the issues you have analyzed and critiqued to your current event and the material of previous assignments to discern broader themes, similar concepts, and comparable or contrasting opinions.