Course Syllabus
Foundations of Global Environmental Sustainability

GES 101/ 001; 3 credits	10:00-10:50 MWF; Pl Sci C101

Faculty Contact Information

Instructor:	Susan Melzer, Ph.D.	**Teaching Assistant:** Jocelyn Cramer
Office Phone:	970-491-1323	
Email:	Susan.melzer@colostate.edu	jocelyn.cramer@colostate.edu
Office Hours:	M/W 3:00-4:00; Pl Sci C019	W 11:00-12:00 and F 10:00-11:00

Course Description

This introductory course provides an interdisciplinary analysis of the concepts, foundations, and metrics of global environmental sustainability. These analyses are applied to global challenges within the fields of environmental sciences, with an emphasis on urban and rural settings of the developing and developed world. The course will first explore the historical development of "sustainability" as a concept and it will then look at how the concept of sustainability has influenced real-world practice in various sectors such as health, agriculture, natural resource management, poverty reduction, and other relevant areas of study.

Course Outcomes

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

1. Describe what is meant by sustainability from multidisciplinary perspectives.
2. Identify the challenges of defining, measuring, and implementing practices of sustainability in the real world.
3. Discuss the theoretical and historical roots of sustainable development and how it is evolving in an era of globalization.
4. Compare the evolution of sustainability-thinking and development as it pertains to specific critical environmental zones and regions: semi-arid/arid regions, montane zones, oceans, coastal/insular regions, tropical forests, boreal forests, river basins.
5. Describe the concepts underpinning environmental security as a unifying theme for analysis and intervention at the national and global level, focusing specifically on global environmental policymaking.
6. Analyze global environmental threats, e.g., ozone depletion, desertification, deforestation, biogeochemical cycle disruption, and water management by analyzing specific case studies dealing with environmental disasters.
7. Evaluate the basic policy issues of implementing sustainable development in agricultural, urban, and rural regions of the developing and developed world.

Required Course Materials

Readings from the text are a guided exploration of different topics related to environmental sustainability.
Required E-Book: Environmental Science and Sustainability. 2024. 2nd edition. Sherman and Montgomery. ISBN:978-0-393-89350-2

Methods of Instruction

This is a 3-credit hour course. Information will be delivered through face- to- face instruction and all course materials will be provided electronically through Canvas. Lectures will be in the form of power point presentations. You will receive reminders and announcements every Monday via Canvas.

Course Attendance and Participation Policy

Regular, active, and meaningful participation in learning activities is a critically important component of this course and is essential to your success. Students are required to participate in all class discussions and work must be submitted on time.

Grading Policy and Student Evaluation

Grading Policy:

All written assignments and projects are graded as per the grading rubrics found at the end of the syllabus.
   Late Work: University excused absences are accepted and eligible for full credit. Otherwise, please see the following protocol for late work:
   - 10% of the work is deducted per day it is late up to 4 days at which time it will receive a zero
   - Plan. This syllabus lists all the course assignments, projects, activities, and exams for the entire course. Note: computer problems are not a valid excuse for late work.

Grade Breakdown: *Grades will be based on performance in Six areas:*

1. **Reading Quizzes (20%)** – Each week you will be assigned readings from your E-Book. Each weekly quiz will take place in Canvas. They are worth 20 points each and are due on the Fridays of the respective assigned week.

2. **Assignments (30%)** – Assignments will use measures, indicators, and other statistics in sustainable development. Access assignments within Canvas on the assigned week and submit assignments using the appropriate submission box.

   #1 Logical Fallacies-Students will identify logical fallacies presented in the media to understand the importance of sourcing information.

   #2 Global Temperatures-Students will analyze real temperature data by constructing graphs in excel and answering questions on short- and long- term data sets.

   #3 Food miles- Students will learn about the way food is transported and the impact it has on society.

   #4 Population Dynamics- Students will obtain and analyze global population data to make assessments about resource availability and sustainability.

   #5 Life Cycle Analysis- Students will conduct a life cycle analysis of an object to assess the cradle to grave trajectory of material source to material waste.

3. **Written Critique (15%)** – Three critiques on student selected documentaries will be assigned.

4. **External Engagement (10%) –** Students are required to engage with the sustainability community on two separate occasions within the course of the semester, once before and once after Spring Break. These engagement opportunities may be campus or community presentations or panel discussions and may be ones that you have discovered or that the instructor has announced.

5. **Final Project (15%)** – Students will work in assigned groups to conduct in-depth research on a specific problem or issue within environmental sustainability. Students will gain topic approval and formulate a plan to guide the development and success of project completion.

6. **Exams (10%)** – Two multiple choice exams will be administered to assess student comprehension.

Grades will be distributed according to the following breakdown:

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

Assessment	Points on each assignment	Total Points	Percent
Reading Quizzes (10)	20	200	20
Assignments (5)	60	300	30
External Engagement (2)	50	100	10
Critiques (3)	50	150	15
Final project topic (1)	10	10	1
Final project brief/site map (1)	40	40	4
Final project (1)	100	100	10
Exams (2)	50	100	10
Total		**1000**	**100%**

Course Schedule and Due Dates

Please find the course schedule in a separate document on Canvas and read and refer to it regularly. It will tell you what assignments you should complete, and how and when you will be assessed.

Changes to the Syllabus
- The instructor reserves the right to make changes to this syllabus. If changes become necessary, students will be notified in class and through Canvas.

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.**

Other Policies and Procedures

Academic Honesty:

This course will adhere to the Academic Integrity Policy {Section 1.6} of the Colorado State University General Catalog, the Student Conduct Code, and University Principles of Community.
- Student Conduct Code
- Colorado State University General Catalog

- Each student's work must be the result of his/her own thought, research, or self-expression.
- Cheating includes, but is not limited to: copying the work of another person (plagiarism) or permitting your work to be copied by another person, discussing test answers or questions with people who have not completed the test, possessing course materials that have not been formally released to students in the course, and collaborating on the completion of assignments not specifically designated in the syllabus as being group projects.
- Cheating will be considered a breach of CSU's Code of Conduct Policy and may result in academic penalties (zero points on the assignment/test in question, a failing grade for the course), disciplinary action, and/or a referral to the Dean of Student Affairs.

Student Success Tips and Other Resources

To be successful in this course, you need to be organized and manage your time well so that you can complete all assessments on time. Make sure 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.

Special Needs:
Students having special needs as defined by the Americans with Disabilities Act should:
- Notify the Office of Disability Services early in the term. It is the student's responsibility to contact the Disability Support Office to document disability prior to receiving services.
- Notify the instructor after you have contacted the Office of Disability Services to discuss what reasonable accommodations would be appropriate for your situation.

Need Help? Rams Take Care of Rams
- Reach out and ask for help if you or someone you know is having a difficult time. Always feel free to come and talk to me; I will always make myself available to help connect you with any resources you need. CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress, or thoughts of hurting yourself or others please know there is help available.
- Counseling Services has trained professionals who can help. Contact 970-491-6053 or go to http://health.colostate.edu. If you are concerned about a friend or peer, tell someone by calling 970-491-1350 (or visit https://supportandsafety.colostate.edu/tell-someone/) to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources.

Principles of Community
We strive to follow and extend CSU's Principles of Community, and welcome spirited discussion, lively debate, and pursuit of knowledge in a manner that respects each of us as individuals.
- Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, 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.

Classroom Etiquette
- No animals are allowed in the classroom except those defined in the CSU policy regarding SERVICE animals. No emotional support animals are allowed in class.
- Please silence your phone and other electronic devices during class.
- Please be quiet while in class. It can be difficult to hear in a large classroom and even quiet talking can be very disruptive to other students who are trying to listen.

Grading Rubrics

Critique Rubric (50 points=100%)

Category	7 (full marks)	4 (some marks)	2 (few marks)	1 (unsatisfactory)
Content: Focus	Sustainability topic/subject is clear, though it may/may not be explicitly stated.	Sustainability topic/subject is generally clear though it may not be explicitly stated.	Sustainability topic/subject may be vague.	Sustainability topic/subject may be unclear or confusing.
Content: Organization	Organizational structure establishes relationship between/among Sustainability ideas/events.	Organizational structure establishes relationships between Sustainability ideas/events, although minor lapses may be present.	Organizational structure establishes some relationship between/among some of the Sustainability ideas/events. The structure is minimally complete.	Organizational structure does not establish connections between/among Sustainability ideas/events. The overall structure is incomplete or confusing.
Content: Quality of Information	Support information is related to and supportive of the Sustainability topic/subject. Information includes supporting details and examples.	Support information has minor weaknesses in relatedness to and/or support of the Sustainability topic/subject. Information includes most supporting details and examples.	Support information has major weaknesses in relatedness to and/or support of the Sustainability topic/subject. Information includes some supporting details but no examples.	An attempt has been made to add support information, but it was unrelated to Sustainability or confusing.
Content: Consistency and Balance	Maintains focus on Sustainability topic/subject throughout response.	May exhibit minor lapses in focus on Sustainability topic/subject.	May lose or may exhibit major lapses in focus on Sustainability topic/subject.	May fail to establish focus on Sustainability topic/subject.
Content: Style (sentence fluency)	Demonstrates skillful sentence fluency (varies length, good flow rhythm, and varied structure).	Demonstrates reasonable sentence fluency.	Demonstrates minimal sentence fluency.	Sentence fluency is lacking.
Content: Style (vocabulary)	Exhibits skillful use of vocabulary related to sustainability that is precise and purposeful.	Exhibits reasonable use of vocabulary related to sustainability that is precise and purposeful.	Exhibits minimal use of vocabulary related to sustainability and is not always precise or purposeful.	Lacks use of vocabulary related to sustainability that is precise and purposeful.
Category	**4 (full marks)**	**3 (some marks)**	**2 (few marks)**	**1 (unsatisfactory)**

Mechanics	Exhibits excellent control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.	Exhibits good control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.	Exhibits reasonable control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.	Exhibits minimal control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.
Cited Sources	Successfully seeks out additional quality sources that go beyond those required. All cited sources are accurately documented in the desired format.	Successfully seeks out additional quality sources that go beyond those required. All cited sources are accurately documented, but a few are not in the desired format.	Did not go beyond the required sources to seek out additional quality sources. Most cited sources are accurately documented, but many are not in the desired format.	Did not go beyond the required sources to seek out additional quality sources. Most cited sources are not accurately documented or in the desired format.

Assignment and Final Project Creative Brief/ Site Map Scoring Rubric (60 points = 100%)

ASSIGNMENT RUBRIC (Assignments 1-5)				
Criteria	**Highly Proficient (81-100%)**	**Moderately Proficient (61-80%)**	**Somewhat Proficient (41-60%)**	**Not Proficient (0-40%)**
Title Information	*5 points* Title information includes name, date, and title	*4 points* Missing one or two items from highly proficient criteria	*3 points* Missing title information	*2 points* Missing title information
Data and Observations	*10 points* All required data is present and displayed in appropriate tables/ graphs, which are labeled correctly; and any observations made are concise and detailed.	*8 points* All data/observations are not organized and concise; some data is missing.	*6 points* Minimal data or observations are reported.	*4 points* Required data is missing.
Calculations	*10 points* Examples of all calculations needed to analyze the data and obtain results are included.	*8 points* Example calculations are included, but one or two calculations are either not included or are not correct.	*6 points* Minimal example of calculations or work is shown, but calculations are correct.	*4 points* Calculations are missing.
Lab Question Answers	*15 points* Demonstrates a clear understanding of the assignment. All questions are correctly answered in full sentences.	*12 points* Demonstrates an understanding of the assignment. Less than 70% but more than 50% of questions are answered correctly.	*9 points* Demonstrates somewhat of an understanding of the assignments. Less than 50%, but more than 40% of questions are answered correctly.	*6 points* Demonstrates little or no understanding of the assignment, or answers are missing.
Conclusions	*15 points* All aspects of the assignment are addressed, and conclusions are well thought out. Uses	*12 points* A minor aspect of the lab is missing from the conclusions, but statements are well	*9 points* Few or no conclusions are mentioned and/or statements are not well thought out. Uses	*6 points* Conclusions are missing.

	complete sentences and language that skillfully communicate meaning to readers with clarity and fluency and is virtually error free.	thought out. Uses complete sentences and straightforward language that convey meaning to readers. The language used has few errors.	language that sometimes impedes understanding of meaning because of errors in usage.	
Sources/ Citations	*5 points* References are included with proper APA citations. At minimum, the reading completed for that topic is cited.	*4 points* References are included but not with proper citation.	*3 points* Minimal references are included and not with proper citation	*2 points* No references included.

Final Project Rubric (100 points= 100%)

CATEGORY	10-9	8-7	6	5
Content: Focus	Sustainability topic/subject is clear, though it may/may not be explicitly stated.	Sustainability topic/subject is generally clear though it may not be explicitly stated.	Sustainability topic/subject may be vague.	Sustainability topic/subject may be unclear or confusing.
Content: Organization	Organizational structure establishes relationship between/among Sustainability ideas/events and across webpage components.	Organizational structure establishes relationships between Sustainability ideas/events, although minor lapses may be present.	Organizational structure establishes some relationship between/among some of the Sustainability ideas/events. The structure is minimally complete.	Organizational structure does not establish connections between/among Sustainability ideas/events. The overall structure is incomplete or confusing.
Content: Quality of Information	**(20-18 points)** Support information is related to and supportive of the Sustainability topic/subject. Information includes supporting details and examples.	**(16-14 points)** Support information has minor weaknesses in relatedness to and/or support of the Sustainability topic/subject. Information includes most supporting details and examples.	**(12 points)** Support information has major weaknesses in relatedness to and/or support of the Sustainability topic/subject. Information includes some supporting details but no examples.	**(10 points)** An attempt has been made to add support information, but it was unrelated to sustainability or confusing.
Content: Consistency Balance	Maintains focus on sustainability topic/subject throughout webpage.	May exhibit minor lapses in focus on Sustainability topic/subject.	May lose or may exhibit major lapses in focus on Sustainability topic/subject.	May fail to establish focus on Sustainability topic/subject.
Content: Style and Sentence Fluency	Demonstrates skillful sentence fluency (varied length, good flow rhythm, and varied structure).	Demonstrates reasonable sentence fluency.	Demonstrates minimal sentence fluency.	Sentence fluency is lacking.
Content: Vocabulary	Exhibits skillful use of vocabulary related to sustainability that is precise and purposeful.	Exhibits reasonable use of vocabulary related to Sustainability that is precise and purposeful.	Exhibits minimal use of vocabulary related to Sustainability and is not always precise or purposeful.	Lacks use of vocabulary related to Sustainability that is precise and purposeful.

Mechanics	Exhibits excellent control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.	Exhibits good control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.	Exhibits reasonable control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.	Exhibits minimal control of grammatical conventions appropriate to the writing task: sentence formation; standard usage including agreement, tense, and case; and mechanics including use of capitalization, punctuation, and spelling.
Quality of Sources and Online Information	Successfully uses suggested internet links to find information but goes beyond the required sources to seek out additional quality sources.	Successfully uses suggested Internet links to find information but goes beyond the required sources to seek out additional quality sources.	Uses suggested Internet links to find information but did not go beyond the required sources to seek out additional quality sources.	Need assistance to use suggested internet links. Did not use the recommended links or seek out additional quality sources.
Cited Sources	All cited sources are accurately documented in the desired format.	All cited sources are accurately documented, but a few are not in the desired format.	Most cited sources are accurately documented, but many are not in the desired format.	Most cited sources are not accurately documented or in the desired format.