

ENVR 102: Introduction to Sustainability

Instructor:	Dr. Drew Gower	Term:	Spring Semester 2024
Email:	drew.gower@fmarion.edu	Class Location:	LSF L304
Cell:	864-420-3318 ¹	Class Day/Time:	TTh 11:20am to 12:35pm
Office Hours:	MWF 10:30am to 12pm	Lab Location:	NA
Office Location:	MSB 201F	Lab Day/Time:	NA

Course Description

This course provides a broad overview of issues associated with sustainability, from both a local and a global perspective. We will cover different definitions of sustainability and its relationship to similar concepts like resilience, what it meant for individual societies to be sustainable, the primary threats to sustainability in the Anthropocene, and contemporary proposals for responding to these threats. Course material will be drawn from both popular the and academic media.

Learning Objectives

At the end of the semester, students should be able to:

- Read and interpret academic journal articles
- Write clear, thorough, and appropriately-cited responses to essay prompts
- Define sustainability according to its use in popular and academic media
- Describe the Tragedy of the Commons and how it can be addressed by individual societies
- Explain the concept of planetary boundaries and its relevance to sustainability
- Analyze and evaluate contemporary proposals for achieving sustainability

Course Format

Sustainability is an exceptionally broad topic with profound relevance in the modern world. I hope that after taking this course, you will be able to speak and write fluently about the concept and its historical and contemporary applications. I therefore prioritize in-class discussion over powerpoint lectures and free response questions over multiple choice on exams. To succeed in the course you will need to both complete the assigned readings and attend class. The former will give you the background necessary to engage in class discussions, while the latter will underscore the specific topics that will appear on the exams. In return, I promise to make myself available to students outside of class, respond to emails and grade items promptly, and to avoid "nitpicky" exam questions.

Textbook

There is no official textbook for this course. I will post all assigned readings and supplemental materials on Perusall for you to download.

¹Please use sparingly, no texting

Grading

Your course grades will be the weighted average of your grades on three midterm exams and a final exam (45%), participation (25%), a group presentation (20%), and quizzes (10%). I will then assign letter grades based on the following ranges:

Letter Grade	Percentage Range
A	90 to 100%
B ⁺	87 to 89%
B	80 to 86%
C ⁺	77 to 79%
C	70 to 76%
D ⁺	67 to 69%
D	60 to 66%
F	below 60%

Exams

All exam questions will be free response. The first three exams will only cover material since the previous exam, while the final exam will cover material from the entire course. Exams will be given during regular class time, and must be completed on the assigned day. Exceptions will only be made with proper documentation (e.g. doctor's excuse). I will drop your lowest exam grade, either one of the midterms or the final.

Participation

I will take attendance at the beginning of each class and note down your participation in class discussion and activities and your engagement with the readings through Perusall. I also require that all students come to my office hours at least once over the course of the semester. Your participation grade will be a combination of the above elements.

Group Presentation

In a group of no more than three students, you will present (using slides, discussion, or activities) a previously-unexplored (by us) aspect of sustainability for 20 minutes during one of the last two class periods. Before the presentation, your group will give me a document that lists the contributions of each member. I will then assign grades based on these individual contributions and the overall presentation content and style. After the first exam, we will spend a portion of a class period forming groups and going over potential topics.

Quizzes

At the beginning of each class, I will give short (2 or 3 question) quizzes that are based on the readings we will discuss that day. You will not have the opportunity to make up a quiz if you miss it; however. I will drop your quiz grade if you provide valid documentation for why you were not present. I will also drop your lowest quiz grade.

Extra Credit

You may turn in one two-page, single-spaced summary and evaluation of a scientific article for extra credit worth up to an additional 2% on your final grade. The article should be published in a peer-reviewed journal, relevant to the topic of sustainability, and approved by me ahead of time. You may hand in your review any time before the beginning of our last class period, Thursday April 18th.

Electronic Devices

I do not allow cell phone use during lecture. If you need to have your phone on for some reason (e.g., responsibility for a family member), please set it to vibrate and take any relevant calls outside the classroom. You may use a laptop or tablet for notetaking but you will also need a pen or pencil to take exams.

Accommodations

I am happy to make accommodations for students with special needs. Please notify me of your needs as soon as possible and provide documentation from the Office of Counseling and Testing.

Academic Dishonesty

I take acts of academic dishonesty (as defined in the University student handbook) very seriously. The first violation of the academic integrity policy will result in a grade of 0 on the item in question. You will also be reported to the appropriate university office. University policy is that a second violation will result in suspension from the University for a term of no less than one fall or spring semester while a third offense will result in permanent expulsion from the University.

Course Outline²

Date	Topic	Readings
01/09	No class: Weather	
01/11	Course Introduction	Syllabus
01/16	Reading & Writing	Keshav, 2007; University of Fraser Valley, 2018 Trent University, 2023
01/18	What is Sustainability?	Yates, 2012; Farley & Smith, 2014; Jin, 2021; Briggs, 2023
01/23	Things Fall Apart	Diamond, 2000; Seligson, 2019; Penny & Beach, 2021; Daems, 2023
01/25	The Malthusian Trap	Malthus, 1798 (pp. 5-17); Garcia, 2017; Planet Money, 2019; Roser, 2020
01/30	Escaping the Trap	Sachs, 2008; Turner & Fischer-Kowalski, 2010; Pingali, 2012
02/01	The Tragedy of the Commons	Hardin, 1968; Mildenberger, 2019; Planet Money, 2020
02/06	Triumph of the Commons	Ostrom et al., 1999; Frischmann et al., 2019; Ostolski, 2021
02/08	Exam 1	
02/13	The Anthropocene	Zalasiewicz et al., 2011; Lewis & Maslin, 2015
02/15	Planetary Boundaries	Rockstrom, 2009; Richardson et al., 2023
02/20	Biogeochemical Flows	Barnes, 2019; Beck, 2021; Mukpo, 2021
02/22	Biodiversity Loss	McCray, 2022; McCreless, 2022; Greenfield et al., 2023
02/27	Freshwater Use	Fretwell, 2021; Johnson, 2021; Rojanasakul et al., 2023
02/29	Climate Change	Rosen, 2021; Ramsey, 2022; Williams & Moore, 2023
03/05	No class: Conference	
03/07	Exam 2	
03/12	No class: Spring Break	
03/14	No class: Spring Break	
03/19	Apocalypse Now?	Ehrlich & Ehrlich, 2013; Heinberg, 2018; Kemp et al, 2022
03/21	The Environmental Movement	Meadows et al., 1972 (Introduction); Griswold, 2012; Parenti, 2012; Hayes, 2022
03/26	Environmental Justice	Purdy, 2015; Rockstrom et al., 2023; Skelton & Miller, 2023
03/28	Sustainable Development	Sachs, 2014; Purvis et al., 2018; Fong & Roy, 2023
04/02	Geoengineering	Biermann et al., 2021; McKibben, 2022; Hansen et al., 2023 (Summary)
04/04	Accelerationism	Bastani, 2017; baroquespiral, 2019; Chaney, 2020; Andreesen, 2023
04/09	Degrowth	Vansintjan, 2017; Nordhaus, 2020; Hickel et al., 2022; van Woerden, 2022
04/11	Exam 3	
04/16	Presentations	
04/18	Presentations	
04/26	Final Exam, 3pm	

²Subject to modifications at the discretion of the instructor.