

Introduction to Sustainability

STM101

Spring/Summer 2021 (6/7/2021 to 7/26/2021)

Number of Credits: 3

Days Class Meets: Online Course

Meeting Times: Asynchronous course

Location/Venue: JetNet on

<https://www.jccmi.edu/>

Instructor: Christy Mecey, Ph.D.

Contact Phone: 517-896-5390 (personal cell)

Contact Email: meceychristyf@jccmi.edu

Online Office Hours: As needed via appointment on Zoom or Big Blue Button. Email or text to make an appointment.

Course Description

An introduction to the profound, complex, and uniquely interdisciplinary concept of sustainability. From energy and ecosystems, to food, water, and human behavior, we explore the environmental, technological, and social implications from as many perspectives as possible – all with a realistic, yet hopeful, eye on the future.

Over the past decade, the term “sustainable” has become a handy label for any product, service, industry, person, or behavior that is apparently less destructive to the environment than other options. However, success in this century (your century) requires that we revisit this term honestly and starkly, explore its deeper meaning, and recognize the gravity and consequences of living as unsustainable individuals in an unsustainable world.

Given the pressure on many of our current systems, this century promises to bring significant changes to the way we live. Looking forward, what does this mean for individuals, communities, and society? What skills, qualities, principles, and policies will provide wellbeing and success in your lifetime? This course will help you begin to answer these questions.

Prerequisite(s)

No pre-requisite required.

Course Goals

How to Succeed in this course:

1. Attend class (VIA ON-LINE LINK) – participating in weekly lectures, assignments and exams will be very helpful in achieving a good grade in this course.. Make-up exams will NOT be granted without medical certification or pre-approval from the instructor.
2. Read the assigned chapters before attending class. With shortened semesters, class lectures can move quite rapidly and only cover part of the material you are required to learn. You will be responsible for all reading material that is assigned.
3. Thoughtfully engage in group discussion forums – You will be graded on your participation in group discussion forums. An on-line component is essential for a hybrid-learning course. By asking thoughtful questions and engaging your classmates in discussion, you will be able to explore topics on a more detailed level.
4. Form a study group – Making time to work with a study group on a weekly basis can enable students to share information and discuss topics that they may not feel comfortable discussing in class. You can enable study groups through video conferencing formats on Zoom, BBB or Google.

5. Plan to spend at minimum 6-8 hours a week reading the text and reviewing the lectures online. Each section of the course will contain several chapters to read along with posted lectures on our Jetnet page.
6. Check your email and our class JetNet page as often as possible, ideally at least once a day. Your classmates and I will be posting things in the discussion forums. In addition, I will also post announcements and video updates frequently.

Course Objectives

Following the completion of this course, students will be able to:

- Understand and explain the meaning of the word “sustainability”
- Demonstrate foundational and practical knowledge in the science of sustainability
- Appreciate the complexity and interconnected nature of environmental and social issues
- Think critically, express ideas, make informed decisions, solve problems, and engage others in environmental issues
- Enhance one’s understanding of one’s own viewpoint and ethics
- Possess the facts necessary to question, challenge, and influence the views of others
- Be able to contribute positively, and meaningfully, toward progress and sustainability in the 21st century

The course goals and objectives incorporate specific General Education Outcomes (GEOs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges and universities and reflect input from the professional communities we serve. GEOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The GEOs and course objectives addressed in this class include the following: GEO 2- Speak clearly, concisely and intelligibly; GEO 4-Demonstrate scientific reasoning and GEO 5- Understand human behavior and social systems, and the principles which govern them.

Textbook

Text: Essential Environment by Jay Withgott and Matthew Laposata (Fifth Edition). The textbook is available in both electronic and printed versions. ISBN: 13:978-0-321-98457-9

- **Text Book Zero!** *This text is available in a digital format. Please see the links posted on our class Jet Net site. This text is available to rent or purchase in digital format through the JC Bookstore.*

Other: No additional materials are required, but due to the online components of the course, regular computer and internet access will be essential for successful completion of the course.

Extras

- You must have a web camera and microphone to take exams for this course. They can be purchased from any source including those found on-line, at local stores or the student bookstore.
- Interactive testing sections in this course will not be compatible with a cell phone interface. A laptop or tablet will be required to complete assignments. There have been issues with using Chromebook and you will need to use a tablet or laptop other than Chromebook for testing in this class.

Exam Process

For students with pre-determined and documented exceptions to regular testing conditions, exams will be offered through the Jackson College On-line Testing Center Services. A webcam and microphone will be required to take exams. You must let me know that you have these circumstances so I am sure to have the documents to the Testing Center. You will be given a window of time to complete an exam.

Extensions for taking exams will not be offered. To take the exam, you will need to make an appointment with the testing center at:

TestingLab@jccmi.edu

The testing center is available to proctor from 8 a.m. to 5 p.m. Monday through Friday or by appointment.

For all other students, we will utilize the Respondus application. To protect the fairness and integrity of the exams, students will be required to take exams using Respondus Lockdown Browser and Monitor. This is an online test proctoring software that requires a download to your computer. Training and practice of Respondus technology will be provided in advance of the first exam. A Mac or PC that has a webcam and microphone is required to use Respondus. If you do not have this technology, please contact your instructor right away. Students are expected to complete the Respondus Practice quiz on time. This is to give our IT department time to help troubleshoot issues **before** exam 1 begins. Failure to complete the Respondus quiz on time may result in instructor-initiated drop.

Grading Procedure

Your grade in the course will be based on:

Discussion posts- (10% of overall grade)

For each module you have between 1-2 questions to answer in a discussion post. In addition, you will need to respond to at least 2 classmates for each question. Posts need to contribute new information or perspective to be considered substantive and receive full credit. Posts such as, "I agree, great idea" will

not receive credit. Each response on the discussion boards will be scored out of 5 points. Follow up comments will be worth 2.5 points each. Due to the interactive nature of the discussion posts, these will not be counted for credit following the due date.

Case studies/Writing Assignments/Video Summaries- (50% of overall grade)

For most modules we will have a case study and/or video summary that are used as an example to highlight important aspects of your readings in the text. You will be required to answer questions or review related websites and upload your responses. There will be two writing assignments in the course- one based on civic engagement, the other based on research in a field of environmental science.

Weekly Quizzes - (30% of overall grade)

Weekly quizzes will be given in this course, featuring a mix of multiple choice, short answer and essay style questions. This quiz will be timed and assess your understanding of the material that we have covered. Questions for the quiz will come from assigned readings in the text and lecture material. Any activities or websites included in the material are also fair game to be included on the quiz. Make-up exams will not be offered unless a written medical note is provided to excuse absence. Exams will be posted on-line via RespondUs.

Student Project/Presentation- (10% of overall grade)

There will be a student project that will need to be completed and uploaded to our Jetnet page and presented through a video format.

Grading Scale

GPA	GRADE RANGE
4.0	90-100%
3.5	85-89.9%
3.0	80-84.9%
2.5	75-79.9%
2.0	70-74.9%
1.5	65-69.9%
1.0	60-64.9%
0.5	55-59.9%
0.0	0-54.9%

Failure

Students who do not regularly interact with or complete on-line activities may be in danger of failing the course. **STUDENTS WHO DO NOT COMPLETE FIVE LABORATORY ACTIVITIES OR OTHER ASSIGNMENTS BY THE ESTABLISHED DEADLINES WILL BE DROPPED FROM THE COURSE.**

Academic Honesty Policy

Academic Honesty is defined as ethical behavior that includes student production of their own work and not representing others' work as their own, by cheating or by helping others to do so.

Plagiarism is defined as the failure to give credit for the use of material from outside sources.

Plagiarism includes but is not limited to:

- Submitting other's work as your own
- Using data, illustrations, pictures, quotations, or paraphrases from other sources without adequate documentation
- Reusing significant, identical or nearly identical portions of one's own prior work without acknowledging that one is doing so or without citing this original work (self-plagiarism)

Cheating is defined as obtaining answers/material from an outside source without authorization. Cheating includes, but is not limited to:

- Plagiarizing in any form
- Using notes/books/electronic material without authorization
- Copying
- Submitting others' work as your own or submitting your work for others
- Altering graded work
- Falsifying data
- Exhibiting other behaviors generally considered unethical

Allowing your work to be submitted by others

Accessibility

Jackson College understands that cultivating a broadly diverse community is crucial to our educational mission and to our foundational commitment to leadership and service. Jackson College is fully committed to ensuring our courses are accessible to everyone including those with disabilities. We are currently working to increase accessibility and usability of our course materials in order to meet or exceed the requirements of Section 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1991 and Web Content Accessibility Guidelines (WCAG) 2.0. For

more information about Jackson College's efforts to ensure accessibility please visit the [Jackson College accessibility web page](#).

If you have an accessibility need in any of our classes please e-mail the Center for Student Success at JCCSS@jccmi.edu or visit the [Center for Student Success web page](#).

At the Center for Student Success (CSS), we are committed to providing all students the opportunity to achieve academic success by providing a variety of support services free of charge to Jackson College students. This includes, but is not limited to, peer and faculty tutoring, mental health referral, temporary assistance with transportation, various workshops/seminars, and the TRIO program.

In addition, the CSS staff is committed to adapting the College's general services to meet the individual needs of otherwise qualified students with disabilities, for the purpose of providing equal access to all programs and facilities.

Course Management

Under extraordinary circumstances, a student can request as Incomplete, to be completed in a timely fashion after the end of the normal term. Incompletes are governed by the JC Policy on Incomplete grades (see JC Policy page on the JC website) and are only given if a small percentage of work is left incomplete, the student is currently passing the class when they request the incomplete, and there is a reasonable expectation the work can be completed within the next term.

Students that have medical issues during the term should discuss the possibility of a medical withdrawal from the course with the Admissions Office.

Makeup Policy

There are no make-up laboratories granted in this class due to the nature of work done. Exams are generally not available for make-up, but under extraordinary circumstances, alternative times prior to the original time may be arranged at the discretion of the instructor. Note, prior planned travel (i.e. leaving for a vacation early) is NOT considered a legitimate reason for alternative times.

Help

[Academic Advising](#)

It is important to contact a Center for Student Success professional prior to the start of the semester in order to receive accommodations in a timely manner. While we will make every effort to coordinate accommodations in a timely manner, failure to self-identify prior to the start of the semester may delay notification to instructors and timeliness of acquiring accommodations. Accommodations do not automatically carry over to the next semester. Please e-mail JCCSS@jccmi.edu or visit the [Accommodations for Students with Disabilities](#) web page

Attendance- Participation Policy

Just as in a traditional classroom course, regular class participation and keeping up on the reading and assignments is strongly correlated with survival in college. It is my recommendation that you plan to do your assignments and take your exams BEFORE the last day they are due. If problems occur, there is time to fix them before the deadline.

In compliance with Federal Title IV funding requirements, as well as college initiatives, I will be monitoring student participation on a regular basis and officially reporting student activity throughout the term to assure compliance with college policy and federal regulations. It is imperative that you log in to the course and actively participate *within the first couple days of the term* to validate your enrollment in the course. After that, not actively participating in class may result in you being withdrawn from the course. Being withdrawn from a course can have an impact on financial aid, billing, athletic eligibility, and housing status. As a college student you are responsible for how your participation impacts your academic progress; the accountability lies with you.

Caveat

Some revisions may be necessary during the course. School closing policies, instructor illness and other procedural improbabilities may result in a rescheduling of class activities. All students will be notified by JetNet in case of such unforeseen circumstances.

Calendar

Syllabus Revisions/Changes

All schedules and policies contained in this document are tentative and are subject to revision at the instructor's discretion with timely notice.

Course Outline

Module 1: Introductions, Syllabus, Environmental Science, Evolution, Population Ecology, Species, Communities

Dates: 6/7/2021

Text chapters: Chapters 1, 3 & 4

Module 2: Environmental Systems, Matter, Energy, Ecosystems

Dates: 6/14/2021

Text chapters: Chapters 4-8

Module 3: Environmental Ethics, Economics and Policy, Human Population, Urbanization, Sprawl

Dates: 6/21/2021

Text chapters: Chapters 5 & 6

Module 4: Environmental Health, Toxicology and Waste

Dates: 6/28/2021

Text chapters: Chapters 10 & 17

Module 5: Freshwater, Oceans, and Coasts

Dates: 7/6/2021

Text chapters: Chapters 12

Module 6: Atmospheric Science, Air Pollution, Climate

Dates: 7/12/2021

Text chapters: Chapters 13 & 14

Module 7: Mining, Fossil Fuels, Renewable Energy, Alternatives, Sustainable Cities

Dates: 7/19/2021

Text chapters: Chapter 16 & 18

Calendar

WEEK #	DATE	TOPIC	TEXTBOOK READING	HOMEWORK /ASSIGNMENTS
1	6/7/2021	Course Overview Environmental Science, Evolution, Population Ecology, Species, Communities	Chapters 1, 3 & 4	Week 1 Discussion Question Case Study: Ecological Footprint Video w/ Summary: Living the Change (Kanopy) Overview for Research Paper Week 1 Quiz
2	6/14/2021	Environmental Systems, Matter, Energy & Ecosystems	Chapters 4-8	Week 2 Discussion Question Case Study: Pollution and Nutrient Cycling Overview for Student Presentation Project Week 2 Quiz
3	6/21/2021	Environmental Ethics, Economics & Policy, Human Population, Urbanization, Sprawl	Chapters 5 & 6	Week 3 Discussion Question RESEARCH PAPERS DUE Video w/ Summary: Rise & Fall: Population, Urbanization and the Environment (Kanopy) Week 3 Quiz

4	6/28/2021	Environmental Health, Toxicology & Waste	Chapters 10 & 17	Week 4 Discussion Question Video w/ Summary: Plastic Planet (Kanopy) Case Study: Composting Week 4 Quiz
5	7/6/2021	Freshwater, Oceans & Coasts	Chapter 12	Week 5 Discussion Question Case Study: Texas Golf Course Video w/ Summary: Water – PBS: Part of the Series: EARTH (Kanopy) Video w/ Summary: Watershed Revolution (Kanopy) Week 5 Quiz
6	7/12/2021	Atmospheric Science, Air Pollution, Climate	Chapters 13 & 14	Week 6 Discussion Question Video w/ Summary: The Future of Energy (Kanopy) Video w/ Summary: Deep Green: Solutions to Stop Global Warming Now (Kanopy) Case Study: Corn Ethanol Debate Week 6 Quiz

7	7/19/2021	Mining, Fossil Fuels, Renewable Energy, Alternatives & Sustainable Cities	Chapters 16 & 18	STUDENT PROJECTS DUE Week 7 Quiz
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Important Dates:

Spring 2021 Academic Calendar

Event	Dates	Notes
COURSE DATES		
REGISTRATION BEGINS FOR ALL STUDENTS <i>New students must contact Admissions at 517.796.8425 prior to registering for classes.</i>	Feb. 24, 2021	
Semester Dates	May 10 – Aug. 9, 2021	
12 Week Session	May 10 – Aug. 9, 2021	View classes starting May 10
7 Week Session	June 7 – July 26, 2021	View classes starting June 7
5 Week Session	July 6 – August 9, 2021	View classes starting July 6
OTHER DATES		
Memorial Day Holiday	May 29 – 31, 2021	No classes
Independence Day Holiday	July 3 – 5, 2021	No classes