HUDSON COUNTY COMMUNITY COLLEGE ENV- 103-01- Sustainability and Conservation Credits: 3



Catalogue course description:

This course introduces students to the principles and practices of sustainability. It explores the origins and evolution of the discourse surrounding the idea of sustainable development, as it applies to global and local processes and practices. The course focuses on synthesizing ecological, economic and social domains taking into account the long-term consequences of present-day actions. Students will engage with issues such as population growth dynamics, energy and resources use, pollution, climate change mitigation and adaptation, food and nutrition, health and sanitation, water, social justice and equality, and poverty reduction. Students will develop a sound understanding of the use of sustainability indicators and quality-of-life metrics, and will understand the ways in which these can be applied to help guide the practices of sustainability and conservation.

Justification:

With much attention in the media about environment and sustainability, this physical science course is designed to provide the students with an understanding of the ecological, economic and social domains of environment locally and globally. It is an integrative science in that environment and sustainability impacted by human interactions that are disruptive to not only humans but also to the ecosystems at many different levels.

As part of a broader liberal arts and sciences education, the course prepares students to become better informed citizens; able to make reasoned judgments that guide the regulation; protection; and development of our environment in the coming century. This course is an integral part of the Environmental Studies AS program.

Instructor:

Class Time:

Material: Environmental Science: Towards a sustainable Future 13e, by Richard T. Wright and Dorothy F. Boorse

A portion of the course notes will be supplied through Canvas.

Class Structure

This is a lecture and discussion-based class that meets every week. Important material will be covered in every class through a combination of slide presentations, videos, and in-class

activities. Students are encouraged to pay attention to details and take notes whenever possible. Homework assignments and quizzes are designed to synthesize material from the lectures and text. Attending class and completing the quizzes and homework on time will aid in understanding the material.

Students will be required to conduct library research through utilizing books, journals, periodicals and databases on projects approved by the instructor.

Students will complete ten chapter written assignments and a term project. The purpose of the assignments is to allow students to apply the principles and concepts covered in the lecture and to reinforce their understanding of environment and sustainability.

Session	Date	Chapters	Exams		
1		Ch 1 Science and the Environment			
2		Ch 2 Economics, politics and Public Policy			
3		Ch 3 Basic Needs of Living things			
4		Ch 4 Population and Communities	<u>Exam 1 Ch- 1-3</u>		
5		Ch 5 Ecosystems	Project title due by 9pm		
6		Ch 6 Wild Species and Biodiversity Ch 7 The use and restoration of Ecosystem			
7		Ch 8 the Human Population Ch 9 Population and Development			
8		Ch 10 Water Ch 11 Soil	Exam 2- CH 5-9		
9		Ch 14 Energy from fossil fuel	Project outline due by 9pm		
10		Ch 16- Renewable energy			
11		Ch 18 Global climate change			
12		Ch 19 Atmospheric pollution			
13		Ch 20 Water pollution			
14		Ch 23 Sustainable communities	Term Project due-9pm		
15		Exam and review of the course	Exam 3- Ch 10-23		

Course Schedule

Course Requirements and Class Room Conduct

1. Attendance is very important for the successful completion of any course. Attendance to all classes is highly recommended and a record of attendance will be recorded. A student

who has perfect attendance, for all classes, will have points added to his/her final average. This may be beneficial to those who need a few extra points to receive that next higher grade.

- 2. Arrive on time and ready to work. Arriving late could cause you to miss quiz/exam materials, and homework review.
- **3.** Use bathroom before class begins. If you have a medical condition, make arrangements with your professor.
- 4. All students are expected to conduct themselves in mature and responsible manner while in the class room. Avoid side conversation in class. Your whispering is obvious to everyone and disrespectful. Disrespectful conduct will not be tolerated in class room. Courtesy is expected when I am speaking or when one of your classmates is addressing the class. Anyone who violate and repeat violators will be reported to the dean of students and the possible removal from class. Your cooperation is very much appreciated.
- 5. Make sure to have all the cell phones, pagers, etc, turned off when you enter the classroom. These will remain off while in class.
- 6. Please note that text messaging is prohibited in class. It is rude and disruptive. You will be subject to an initial warning if you are found to be sending text messaging in class. Your cooperation is greatly appreciated.
- 7. Student should only leave the class room in case of emergency.
- 8. Feel free to speak with me. Ask questions during class or after class.
- **9.** There is no warning or excuses for cheating. A student who is caught cheating will be dropped from the course immediately and reported to the Dean of students.
- **10.** Since this is a remote session, all the students are expected to turn their cameras on and be infront of the camera during the class.
- 11. Kindly <u>sit</u> in a appropriate place and do not lie on your bed during the lectures.

Reading

In order to succeed in this class, reading should be considered on an going homework assignment. Reading will prepare you for lecture discussions, labs, quizzes, and exams.

Exams

There will be three exams based upon material from lecture, and reading assignments. The exams will consist of multiple choice and true or false questions. You may not make up any exams (unless cleared with me beforehand). If you arrive late you will not be given extra time to complete the exam. If you would like additional help focusing on what need to know for the exam, please see me after class or email me with specific questions. Your report should follow the structure below and should include figures, maps, tables, graphs, and so on.

Report Structure:

The answers MUST be typed using Times or Arial 12 point font.

1-Cover page (Title, your name, Professor's name, semester, date, and course number).

- 2-Introduction
- 3-Body
- 4-Conclusion (summary of your finding)
- 5-References

Evaluation criteria and methods

The grade determination is based on test performance, term project, assignments and final exam. The percentage of each component is established as follows:

Three Exams	60%
Class Participation	10%
Term Project (due week 13th)	30%
Total	100%

Percentages necessary to earn a given final grade are as follows:

reentages neeessarj to earn a grien mar grade are as renows.										
	А	94.0-100%	B+	87.0-89.9%	C+	77.0-79.9%	D+	67.0-69.9%		
	A-	90- 93%	В	83.0-86.9%	С	73.0-76.9%	D	63.0-66.9%		
			B-	80.0-82.9%	C-	70.0-72.9%	D-	60.0-62.9%		

Grades will be supplied through Canvas throughout the semester. It is your responsibility to keep track of your grade and contact the instructor if you are struggling with the material.

Suggested topics:

Solar power: describe two solar power applications

Geothermal energy: describe how it can be harvested and its application

Renewable energy vs. fossil fuel

Renewable and non-renewable ground water

Reducing wasting water in households

Describe major uses of water and explain how water can be conserved

Describe sustainability in agricultural context

Food foot print: Calculate your daily consumption

Academic Integrity

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students earn college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test.
- Submitting the same project in more than one course, without discussing this first with instructors.
- Submitting plagiarized work. Plagiarism is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work. When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on

academic integrity are subject to failing grades on exams or projects, or for the entire course. Serious cases may be reported to a division dean or director for further disciplinary action, including suspension or dismissal from HCCC.

Disability Support Services

Hudson County Community College is committed to providing support to students with disabilities through its Disability Support Services 201-360-4157. To take advantage of these services, students voluntarily disclose pertinent information to the Center for Academic & Student Success (CASS). The Coordinator of Disability Support Services will then schedule a confidential appointment with the student to review documentation and arrange instructional accommodations, as appropriate. Faculty members may not recommend or refer a student to Disability Support Services, unless the student independently requests referral. A complete guide (ACCESS) for students, faculty and staff can be obtained on the Faculty Advising portal page.

Audio-visual recording

Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The complete classroom recording policy is listed in the student handbook.