GEOL-10500-01

Introduction to Environmental Studies

Mode of instruction: Web-Enhanced

Wednesdays 11.30 am to 2.20 pm

Hunter West, Room 511

Fall 2022

Instructor: Dr. Shruti Philips Office: HC North, Room 1032

Office Hours: Wednesdays 10.30 to 11.30 am or by appointment

E-mail: sph0001@hunter.cuny.edu (communications to me must have GEOL 105 in the

subject line and you must sign your full name as it appears in CUNYFirst.)

Department of Geography Office: Rm 1006 HN, Phone: 212-772-5265

Course Description

This course explores important environmental issues facing society today and investigates the science behind those issues. We will study earth's physical systems to understand global climate change, pollution, the use of natural resources, alternative energies and sustainable agriculture. We will also study the fundamentals of evolution and population ecology to understand biodiversity, conservation and the impacts of human activities on different habitats. Finally, we will examine the connections between the biological and physical sciences and environmental politics, environmental economics and environmental ethics and how they each figure in solving environmental problems.

(3 credits; satisfies GER 2E, non-laboratory science; Flexible Core-Scientific World)

Course Learning Objectives

You can expect to finish the course with a basic understanding of:

- The fundamental principles of the physical and biological sciences that govern ecosystems
- The production and uses of **energy, mineral and agricultural resources** and their related issues of **sustainability**
- The main sources of **environmental pollution** and their local and global implications for human and nonhuman life
- The promises and limitations of science and technology for addressing environmental problems
- The complex relationship between science, technology, politics, economics and ethics regarding environmental issues and their potential solutions

Additional Learning Objectives

GEOL 10500 is designed as a first-year, non-lab science course. As such, in addition to learning the basic concepts of environmental science, you will learn:

- How science works
- Quantitative and qualitative reasoning skills
- How to interpret graphs and tables
- Critical thinking skills
- How to locate and read scientific materials

Required Reading:

Modified Mastering Environmental Science with Pearson eText for Jay Withgott and Matthew Laposata (2021) Environment, The Science Behind the Stories, 7/E, ISBN-13: 9780135848685—

- Note: You must have access to 'Mastering Environmental Science', but you may or may not choose to purchase the e-text with it.
- Please log into Blackboard to find detailed instructions on how to purchase the textbook and access to Mastering Environmental science

<u>Blackboard</u>: Please note that course documents, hand-out sheets, and useful links will be posted on Blackboard. <u>Important</u>: Students should check their Hunter e-mail messages regularly for messages from the instructor!

Assessment and Grading Policy:

There will be **two midterm** exams given during the semester and **a final** exam at the end of the semester. Exams are based on <u>lecture</u>, <u>assigned readings</u>, films shown in class and text <u>material</u>.

Midterm Examination-1	20%
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Midterm Examination-2	20%
Final Examination	20%
Mastering Assignments	25%
Case studies	10%
Class participation	5%

Exams will **not** be cumulative. They will comprise of multiple-choice questions. Some material we cover in class may **not** be covered in the textbook. Anything that is discussed inclass is fair game for the exams; therefore, your **attendance**, **attentiveness**, **and participation** at in-class lectures and consistent work on **Mastering assignments** will be extremely important to your success in the course.

Your grades will be assigned based on the CUNY grading policy that can be found in the online undergraduate catalog that can be found at http://catalog.hunter.cuny.edu/.

Exam Policy: A 'make up' for the midterm will be given only if you miss it because (1) you are ill and can prove that with a physician's note; and (2) you e-mail me BEFORE the exam.

• If you miss the final exam a makeup will be given only if you inform me within 72 hours of the day/time of the final exam <u>and</u> present me with checkable documentary evidence of the reason for your absence--a doctor's note, a bill from the hospital, a note from the funeral home etc. For an **IN** to be awarded you must contact me about making

- up the exam and fill out the 'Contract to Resolve an Incomplete Grade' form within 72 hours of the day/time of the final exam. An unresolved IN becomes an FIN at the end of the following semester.
- **CR-NCR** grades will be assigned based on the rules outlined on the CR/NCR form and must be submitted no later than 15 minutes before the beginning of the final exam.
- As per CUNY, an **Unofficial Withdraw (WU)** is assigned to students who <u>attended a minimum of one class</u>. It is important to understand the definition of a WU and the difference between this grade and an F grade. The conditions for assigning the WU grade include:
 - 1. A student's enrollment has been verified by the course instructor, and
 - 2. The student has severed all ties with the course at any time before the final exam week and, consequently, has failed to complete enough course work -- as specified in the course syllabus -- to earn a letter grade, and
 - 3. The student has not officially withdrawn from the course by completing the process for a W grade, or made arrangements to receive an INC.

<u>Attendance</u>: Students are urged to attend <u>all</u> classes. *There is a direct correlation* between good grades and good attendance. All students are responsible for work covered in their absence and must be sure to obtain any hand-out material.

<u>Tips for getting good grades:</u> The more time you put in, the better your grade will be.

- Attend class and take detailed notes.
- Read the assigned material in the text (or other) before coming to class.
- Re-write your notes as soon as possible after class. This will allow you to fill in the
 details still fresh in your memory and prepare questions for the next time the class
 meets.
- Test yourself by answering the questions in the book and in class.
- Carefully study the diagrams and charts in the book and in the lectures.

Academic Integrity: Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures. See the following report by the Hunter College Senate for more details: http://www.hunter.cuny.edu/senate/assets/Documents/Hunter%20College%20Policy%20 on%20Academic%20Integrity.pdf

ADA Policy: In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY, located in Room E1214B, to secure necessary academic accommodations. For further

information and assistance, please call: (212)772-4857 or (212)650-3230.

Hunter College Policy on Sexual Misconduct

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College affirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationship. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

- a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, on contacting the College's Public Safety Office (212-772-4444)
- b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link:

http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf

Tentative Syllabus for Fall 2018

Dates	Lecture Topic	Chapter
W 8/31	Introduction: Science and sustainability; Matter, Energy and Geology	1,2
W 9/7	Evolution, Biodiversity, and Population ecology,	3
W 9/14	Environmental Systems and Ecosystem Ecology	5
W 9/21	Environmental Policy: Making Decisions and Solving Problems	7
W 9/28	MIDTERM-1	
W 10/12	Soil and Agriculture	9
W 10/19	Making Agriculture Sustainable; Forests and Forest Management;	10,12,
W 10/26	The Urban environment: creating sustainable cities	13
W 11/2	Environmental Health and Toxicity	14
W 11/9	MIDTERM-2	
W 11/16	Freshwater Systems and Resources	15
W 11/23	Marine and Coastal Systems and Resources	16
W 11/30	Atmospheric Science, Air Quality, and Pollution Control	17
W 12/7	Global Climate Change	18
TBA	FINAL EXAM	

• Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. Any changes to the syllabus will be posted on Blackboard.