

Syllabus - Fall 2025
Aug 25 – Dec 5, 2025

Excluding materials for purchase, syllabus information may be subject to change.
The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: Environmental Science: NRE 1000E

Credits: 3

Prerequisites: none

Time and Place: STRS WW16

Instructor: Morty Ortega

Email: morty.ortega@uconn.edu (preferred)

Telephone: 860-486-6147

Office Hours/Availability: During the week, I will do my best to respond to all emails within 24 hours. On weekends, I may need more time to do so. Please email me about any questions you might have pertaining to course content, assignments, or similar items. If you have more general inquiries--about a broken link, say, or a missing file--that will affect other students as well, please send me an email. If you need to meet with me, either online or in my office, you can set up an appointment using the NEXUS (<https://nexus.uconn.edu>). I usually set up my Nexus calendars on the weekend, so the visit hours will vary throughout the day, if you need to meet in at any other time, please send me an email.

Mask Use: A legacy from 2020

To ensure a safe learning environment for everyone, masks/face coverings are encouraged, but optional, to wear when inside buildings, including in the classroom. Please be respectful of the wishes of others who prefer to mask. A legacy from 2020, but applicable in a close environment with many people in it. Thank you.

Course Organization

The format for this course includes both meeting in the classroom on Tuesdays and Thursdays and tasks (Assignments and quizzes), which are online and asynchronous, meaning students can complete the work for each module at their own pace within the allotted time frame. The course content is organized into 6 learning modules. Each module is 2-3 weeks long and involves:

- Reading the textbook chapters (see Readings section below),
- Assignment(s),
- Module quizzes, and
- Participatory Short Assignments (PSAs).

Modules will become available at midnight on the day indicated by the course schedule. All work for a given module must be complete by 11:00 pm ET on the final day of the module. Please do not wait until the last minute to complete the tasks. Late work will not be accepted unless previous arrangements with the instructor.

Course Materials

Course Textbook: There is one required text for this course - Andrew Friedland and Rick Relyea. 2016. *Essentials of Environmental Science*. WH Freeman; 2nd Edition. **E-book access:** The e-book version of *Environmental Science* includes activities, simulations, exercises—all integrated with an electronic version of the text. To get the eBook please visit this site, use this [link](#).

You can also find E-book or hard copies in Amazon using this [link](#)

Course Description from Course Catalog

NRE 1000E. Environmental Science

3.00 credits

Prerequisites: RHAG students cannot take more than 22 credits of 1000 level courses

Grading Basis: Graded

An introduction to basic concepts and areas of environmental concern and how these problems can be effectively addressed. Topics include human population; ecological principles; conservation of biological resources; biodiversity; croplands, rangelands, forestlands; soil and water conservation; pollution and water management; and wildlife and fisheries conservation. CA 3.

Course Objectives

Upon successful completion of this course, you should be able to:

1. Discuss the field of environmental science, environmental indicators, and the scientific method
2. Explain human population growth and their limits, and how they have altered the environment
3. Discuss the forms of energy and the basic components of the environment
4. Explain growth models and biodiversity in ecology
5. Discuss the formation of the earth, soil, and water, and its impact on food production
6. Describe uses of resources for production of energy, and its impact on pollution
7. Explain waste and waste management
8. Discuss human and animal health in relation to environmental issues
9. Describe climate change and environmental sustainability.

Course Outline and Schedule

Module 1: Introduction to environmental science and human population growth.

Module 2: Matter, energy, change, ecosystem ecology and evolution, biodiversity.

Module 3: Planet Earth, the soils, the food, and the water.

Module 4: Water resources. Nonrenewable and renewable energy.

Module 5: Pollution, contamination, climate change, and human health risk.

Module 6: Environmental economics, equity, and policy

Course Schedule (*see next page*)

Course Schedule

Week	Units - Topics	Book Readings	Tasks/Assignments/Quizzes
Aug 25 – 29	Orientation <ul style="list-style-type: none"> • Introductions • Syllabus – Assignments 		
Sep 1- 14	Module 1 <ul style="list-style-type: none"> • What is science? What is environmental science? • Human Population Growth • Do we really have that many people? • Linking people and environment 	Ch. 1. Introduction to Environmental Science Ch. 5. Human Population Growth	<ul style="list-style-type: none"> • Assignment 1: Car economy. • Chapters 1 and 5 • Documentary Reflection 1: Film-Can Earth support 8 billion people? • Documentary Reflection 2: Manufacturing Ignorance – Why don't we trust science anymore? • Quizzes 1a and 1b
Sep 15 - 28	Module 2 <ul style="list-style-type: none"> • What is the environment? • Keeping it simple: biochemical cycles • Basic ecology: ecosystems and diversity • Biodiversity and human population 	Ch. 2. Matter, Energy, and Change Ch. 3. Ecosystem Ecology and Biomes Ch. 4. Evolution, Biodiversity, and Community Ecology	<ul style="list-style-type: none"> • Assignment 2: Ecological footprint • Chapter 2, 3 and 4 • Quizzes 2a and 2b
Sep 29 – Oct 12	Module 3 <ul style="list-style-type: none"> • Let's get dirty and talk about soils • Did anybody mention food? • What happen if we get rid of farmers? • Food and human population • Water... is it a plentiful element? • Water and human population 	Ch. 6. Geologic Processes, Soils, and Minerals Ch. 7. Land Resources and Agriculture Ch. 9. Water Resources and Water Pollution	<ul style="list-style-type: none"> • Assignment 3: Personal water use • Chapter 6, 7 and 9 • Documentary Reflection 3: Dirt! The Movie • Documentary Reflection 4: Tapped. • Quiz 3 (only one quiz in this module)
Oct 13 - 26	Module 4 <ul style="list-style-type: none"> • Are we going solar? • Energy and human population • The thick smoke of the mornings! • Ecotoxicology, a complicated term 	Ch. 8. Nonrenewable and Renewable Energy Ch. 10. Air Pollution	<ul style="list-style-type: none"> • Assignment 4: Inventory of personal resources • Chapter 8 and 10 • Quizzes 4a and 4b
Oct 27 - Nov 9	Module 5 <ul style="list-style-type: none"> • Plastics everywhere! • Pollution, trash, and human population 	Ch. 11. Solid Waste Generation and Disposal Ch. 12. Human Health Risk	<ul style="list-style-type: none"> • Assignment 5: Hometown little dirty secret • Chapter 11 and 12 • Quizzes 5a and 5b
Nov 10 – Dec 5	Module 6 <ul style="list-style-type: none"> • <i>It is getting hot in here! Climate vs Weather</i> • <i>Who said that there is no climate change?</i> • Can we make the human environment sustainable? • The environment and the socio-cultural, and economical situation of humans 	Ch. 14. Climate alteration and global warming Ch. 15. Environmental Economics, Equity, and Policy	<ul style="list-style-type: none"> • Assignment 1: Back to Car Economy • Chapter 14 and 15 • Documentary Reflection 5: Fleeing climate change video • Quizzes 6a and 6b

THE FINE PRINT: This schedule is not set on stone, it will change.

Course Requirements and Grading

For this course, you should expect to spend approximately 21 hours per week attending to course activities. You should log in to the course every other day at a minimum to keep up with the workload.

Grading

Assignments – Varied Points per Assignment

There are 6 assignments throughout the course. Some assignments are more involved, so they have higher value. Basic information is included in this syllabus, but more detail and background information on the assignments is posted on HuskyCT.

Assignments

Each assignment MUST be submitted in HuskyCT, no other form will be accepted (via email or printout). The due date is indicated below. **No assignments will be accepted after the due date.**

A #	Assignment	Due Date	Points
1	Car economy. From Sep 1 st until November 30 th , you are required to record the expenses on your car, including gas, oil changes, and other expenses that your car require during this period. If you live on campus and you are not using your car too much, I will highly recommend that you ask your parents or friends to help you out in this assignment. You will be given one data sheet; the data sheet will be posted as pdf in HuskyCT in case you need more. Your will have to ask (beg if necessary!) the drivers to fill the forms for a minimum of 10-weeks. Please ask the drivers to be serious about this assignment and don't make any guesses. Further details will be posted in HuskyCT <ul style="list-style-type: none">Data obtained in the forms must be submitted in SurveyMonkey by December 2nd. This part will have a value of 20 points.You need to submit the data sheet(s) in class on December 4th. No data sheets will be accepted after the deadline. The data sheet is worth another 20 points.You can gain extra points if you submit receipts for one car (no extra credits will be given if receipts are submitted for more than one car). If you submit data sheets for more than one car you will also be given extra points per extra car submitted, up to a maximum of 5 cars.Not providing the data sheet(s) will have a penalty of 20 points.	Dec 2 and Dec 4	40
2	Working with data: Ecological Footprint. Please see description in HuskyCT	Sep 28	30
3	Personal water use. You must measure the water that you spend in a week. Please use the estimates given by the U.S. Geological Service given in the Assignment in HuskyCT. The data should be entered in a SurveyMonkey page given in the HuskyCT page. No data needs to be entered in HuskyCT. Further details will be posted in HuskyCT	Oct 12	50
4	Inventory of my personal resources Each student is required to make a list of all the resources that he/she considered to own. Further details will be posted in HuskyCT. The data should be entered in a SurveyMonkey page given in the HuskyCT page.	Oct 26	50
5	My hometown little dirty secret! Each town has its own little environmental secret out there. It is especially true when we talk about environmental issues. Your assignment is to find out an environmental problem in your hometown, ideally a current problem. Submit the paper as an attachment in HuskyCT. Further details will be posted in HuskyCT. This assignment replaces the final exam.	Nov 23	200

Participatory Short Assignments (PSA) – 20 points each

There will be 5 short assignments given in class, to be answered in HuskyCT. Each assignment is worth 10 points. In HuskyCT you must provide:

1. Answer (minimum of 50 words)
2. Personal comments about the answer (minimum of 50 words)
3. Include **4 references** from the internet in the form of URL

There may be more than 5 PSAs, but the most that you can get is 120 points.

In-Class Discussions (ICA) – 10 points each

There will be 10 discussions in class. Each assignment is worth 10 points.

A question will be asked in class. You will have 5 to 10 mins to discuss it with your neighbor and provide the answer on a card that I will provide.

There may be more than 10 ICDs, but the most that you can get is 120 points.

If you are not in class, you will be able to catch up with the points by participating in other ICAs.

Quizzes

There will be two quizzes per week (except in Module 3, that has only one quiz). Each quiz will use Respondus Lockdown with Monitor. You will be asked to show a photo ID at the beginning of each quiz. For further details, please check in the Quiz section of HuskyCT.

NOTICE: there is no final exam in this class. The final exam has been replaced by Assignment 5.

Textbook reading and in-class discussions

The readings for the text are the base for the knowledge that you will use for the quizzes as well as the discussions that we will have in the classroom. I highly suggest that you keep up with the readings.

Grading

Items	Quantity	Points
Assignments (variable points)	5	370
Participation Short Assignments (PSA; 20 points each)	5	100
In-Class Discussions (ICD; 10 points each)	10	100
Documentary Reflections (50 points each)	5	250
Quizzes (15 points/each, except one for 30 points)	11	180
TOTAL		1,000

The following breakdown will be used to assign final grades:

Points	Grade	Points	Grade	Points	Grade	Points	Grade
1000-940	A	899-866	B+	799-766	C+	699-666	D+
		856-833	B	765-733	C	665-633	D
939-900	A-	832-800	B-	732-700	C-	632-600	D-

With less than 599 points you have failed the course!

Due Dates and Late Policy

All course due dates are identified in the Course Schedule. The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.

All late work will be penalized according to the rules established in the assignment. Not all assignments are allowed to be submitted late, in that case if the task is not submitted on time, the grade will be a zero.

Feedback and Grades

I will make every effort to provide feedback and grades in a timely manner. To keep track of your performance in the course, refer to **My Grades** in HuskyCT.

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Academic Integrity
 - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, [\(860\) 486-2020](tel:8604862020) or <http://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from [Blackboard's website](#))

Software and Hardware Requirements and Technical Help

- Word processing software, such as Microsoft Word
 - Microsoft Office is free to UConn students through uconn.onthehub.com. ([Microsoft Accessibility Statement](#), [Microsoft Privacy Statement](#))
- [Adobe Acrobat Reader](#) ([Adobe Reader Accessibility Statement](#), [Adobe Reader Privacy Policy](#))
- Internet access
- Webcam and (microphone recommended)

Help

This course is completely facilitated online using the learning management platform, [HuskyCT](#). The [Student Help](#) link near the top of the HuskyCT site provides a guidance to technical assistance.

The [Academic Resources](#) link provides information on academic assistance, including information on the Academic Achievement Center for one-on-one coaching.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

University students are expected to demonstrate competency in Computer Technology. Explore the [Computer Technology Competencies](#) page for more information.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the [Office of Institutional Research and Effectiveness](#) (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.

Policy Against Discrimination, Harassment and Related Interpersonal Violence

The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate amorous relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate amorous relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. Additionally, to protect the campus community, all non-confidential University employees (including faculty) are required to report sexual assaults, intimate partner violence, and/or stalking involving a student that they witness or are told about to the Office of Institutional Equity. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help. More information is available at equity.uconn.edu and titleix.uconn.edu.

Statement on Absences from Class Due to Religious Observances and Extra-Curricular Activities

Faculty and instructors are expected to reasonably accommodate individual religious practices unless doing so would result in fundamental alteration of class objectives or undue hardship to the University's legitimate business purposes. Such accommodations may include rescheduling an exam or giving a make-up exam, allowing a presentation to be made on a different date or assigning the student appropriate make-up work that is intrinsically no more difficult than the original assignment. Faculty and instructors are strongly encouraged to allow students to complete work missed due to participation in extra-curricular activities that enrich their experience, support their scholarly development, and benefit the university community. Examples include participation in scholarly presentations, performing arts, and intercollegiate sports, when the participation is at the request of, or coordinated by, a University official. Students should be encouraged to review the course syllabus at the beginning of the semester for potential conflicts and promptly notify their instructor of any anticipated accommodation needs. *Students are responsible for making arrangements in advance to make up missed work.*

For conflicts with examinations, students should contact the Dean of Students Office (<https://dos.uconn.edu>). Faculty and instructors are also encouraged to respond when the Counseling Program for Intercollegiate Athletes (CPIA) requests student progress reports. This will enable the counselors to give our students appropriate advice.