

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE COURSE SYLLABUS

Course Title: INTRODUCTION TO ENVIRONMENTAL SCIENCE **Course #:** EVS* 100

Course Description: 3 semester hours (3 lecture hours) This three credit, non-laboratory science course is designed to provide an overview of long-term effects on the well-being of the planet and its inhabitants. The course will also examine population, resources, pollution, and attitudes.

Pre-requisite/Co-requisite: Eligibility for, or completion of, ENG* 101. Computer skills, including email, word processing, and web navigation **are critical** for this course.

Goals: To provide the student with a basic understanding the major environmental challenges facing modern societies and understand the choices and trade-offs these challenges pose; to help students grasp the scientific principles underlying the basic phenomena of environmental change; to provide students with an understanding of the technologies associated with major environmental problems and the technologies that may help solve these problems; to assist students in distinguishing the environmental impacts of industrial and developing societies; to provide the student with a basic understanding of how different types of societies perceive different problems and pursue different solutions; to delineate how the issues discussed in the course are connected to the decisions and choices students make in their personal lives; to help students appreciate that the complexities and intricacies of environmental problems demand a holistic approach, manifest by team work and group communication.

Outcomes: At the end of the course, students should be able to:

- Define the term environment and identify important environmental concerns we face today
- Compare and contrast how different ethical perspectives shape our view of nature and our role in it and describe how religious and cultural traditions, worldviews, and core values influence our perceptions of nature
- Summarize methods, applications, and limitations of the scientific method.
- Summarize major biogeochemical cycles, including the hydrologic cycle, and how each is balanced over time in the hydrosphere, lithosphere, and atmosphere.
- Describe the soil properties of porosity and permeability and characterize a soil sample.
- Describe how environmental factors determine which species live in a given ecosystem and where or how they live.
- Appreciate the potential of exponential growth and define fecundity, fertility, birth rates, life expectancy, death rates, and survivorship; compare and contrast density-dependent and density-independent population processes.
- Recognize characteristics of major aquatic and terrestrial biomes, identify important factors that determine the distribution of each type, and describe ways in which humans disrupt or damage each of these ecosystem types.
- Diagram and categorize the relationships between organisms of various trophic levels within a community and explain the functions of each aspect of a food web.
- Trace human population growth history, discuss the environmental and social impacts of human population growth, and explain the process of demographic transition.
- Identify human contributions to global climate change and what effects modifications have on physical and biological systems.
- Summarize benefits humans derive from biodiversity and identify sources of biodiversity loss in the modern world.
- Identify land use practices, problems, and policy.
- Interpret and assess the effects of land use practices on the porosity, permeability, and erosivity of the soil.
- Recognize the origins and current problems of national parks in America and other countries.
- Analyze various strategies being utilized to conserve biodiversity and ecosystems.
- Identify some major infectious organisms and hazardous agents that cause environmental diseases and examples of emergent human and ecological diseases.
- Distinguish between toxic and hazardous chemicals, including pesticides, and between chronic and acute exposures and responses.
- Differentiate between famine and chronic undernutrition and understand the relation between natural disasters and social or economic forces in triggering food shortages.
- Describe the pros and cons of various food sources and identify the life cycle of major food crops in modern society.
- Predict, using systems thinking, agricultural challenges that might result from climate change.
- Make recommendations for sustainable agricultural practices in a hypothetical scenario.
- Identify ways to reduce the ecological footprint of food and evaluate the movements of localism and organic as effective strategies in sustainable food systems.
- Summarize our current supply and needs, including the costs/benefits of all conventional energy sources, and explain briefly how energy use has changed through history.

- Appreciate the opportunities for energy conservation and renewable energy sources available to us.
- Describe the major categories and sources of air pollution, judge how air quality around the world has improved or degraded in recent years, and suggest what we might do about problem areas.
- Appreciate the causes and consequences of water shortages around the world, what they mean in people's lives in water-poor countries, and what the future projections for water shortages entail.
- Analyze personal water consumption and evaluate water-saving strategies.
- Define water pollution, including sources and effects of some major types, judge impacts of water pollution legislation, and differentiate between best available/best practical technology and total maximum daily pollution loads.
- Identify the major components of the waste stream, including toxic and hazardous wastes, and describe how wastes have been - and are being - disposed of in North America and around the world.
- Analyze personal trash production and identify strategies to reduce solid and hazardous waste.
- Explain how resource supply and demand affect price and technological progress.
- Define ecological economics and identify its basic tenants.
- Recognize opportunities for making a difference through goods and services, as well as limits of green consumerism.
- Identify 'greenwashing' practices within companies, governments, and non-governmental organizations.
- Appreciate the importance of wicked problems, resilience, and adaptive management in environmental planning.
- Evaluate how green politics and environmental citizenship can help protect the earth.
- Evaluate the major environmental risks we face and how risk assessment and risk acceptability are determined.
- Formulate their own philosophy and action plan for what they can and should do to create a better world and a sustainable environment

Evaluation:

Mastery of outcomes will be evaluated through a mix of projects, writing assignments, discussions, and quests. Please see the Grading Structure below for details.

College Policies:

- **Plagiarism:** Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanctions ranging from failure of the assignment (receiving a zero), failing the course, being removed/expelled from the program and/or the College. Please refer to your "Student Handbook" under "Policy on Student Rights," the Section entitled "Student Discipline," or the College catalog for additional information.
- **Americans with Disabilities Act (ADA):** The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Dr. Ruth Gonzalez, Director of Student Development. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6315 and her email is rgonzalez@nwcc.edu.
- **School Cancellations:** If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio and television stations and posted on the College's website at www.nwcc.edu. Students may also call the College directly at **(860) 738-6464** to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.
- **Use of Electronic Devices:** Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, quizzes, completing assignments, or submitting substantive discussion posts.
- **Course Withdrawal:** If you are thinking about withdrawing from this class, SPEAK TO YOUR INSTRUCTOR first. Your instructor will be able to give you an idea of how you are doing overall and may be able to offer you suggestions for improvement and explain other options available. BEFORE you withdraw, consider the following:
 - Withdrawing from a class can have an impact not only on your current funding (e.g. Financial Aid, Veteran's benefits or Scholarships, etc.) but may also impact your FUTURE funding
 - Withdrawing from a class will make you ineligible for Dean's List Honors for that semester
 - Too many W's on your transcript can impact your ability to transfer to a four-year institution, acceptance into a particular degree program and/or acceptance into graduate school
- **Sexual Assault and Intimate Partner Violence Resource Team:** NCCC is committed to creating a community that is safe and supportive of people of all gender and sexual identities. This pertains to the entire campus community, whether on ground or virtual, students, faculty, or staff.

Sexual assault and intimate partner violence is an affront to our national conscience, and one we cannot ignore. It is our hope that no one within our campus community will become a victim of these crimes. However, if it occurs, NCCC has created the SART Team - Sexual Assault and Intimate Partner Violence Resource Team - to meet the victim's needs.

SART is a campus and community based team that is fully trained to provide trauma-informed compassionate service and referrals for comprehensive care. The team works in partnership with The Susan B. Anthony Project to extend services 24 hours a day, 7 days a week throughout the year.

The NCCC team members are:

Ruth Gonzalez, Ph.D.	860-738-6315	Green Woods Hall Room 207
Susan Berg	860-738-6342	Green Woods Hall Room 223
Kathleen Chapman	860-738-6344	Green Woods Hall Room 110
Michael Emanuel	860-738-6389	Founders Hall Annex Room 308
Seth Kershner	860-738-6481	Library
Jane O'Grady	860-738-6393	Founders Hall Annex Room 212
Robin Orlomski	860-738-6416	Business Office Room 201
Patricia Bouffard, Ex-Officio	860-738-6319	Founders Hall Room 103
Savannah Schmitt		Student Representative

At NCCC we care about our students, staff and faculty and their well-being. It is our intention to facilitate the resources needed to help achieve both physical and emotional health.

COURSE OVERVIEW

SPRING 2017

Course Title: INTRODUCTION TO ENVIRONMENTAL SCIENCE **Number & Section:** EVS* 100 **CRN#:** 1062

Course Type: LECTURE (BB SUPPORTED) **Instructor:** PROFESSOR TARA JO HOLMBERG **Phone:** 860-738-6363

Office number: ASB 206 **E-Mail:** tholmberg@nwcc.edu

Office hours (or by appt): M 3-4, W 11:30-12:30, and W 3-4

Text/Course Materials: All readings/media will be available in BB. Students must also have access to a computer with Microsoft Office compatible software, either at home or at the library. Regular, reliable internet access is a REQUIREMENT of this course.

Course Progression: (subject to change at Instructor's Discretion).

There will also be routine quests and assignments on BlackBoard and in class.

WEEK	TOPIC	QUESTS
1	Understanding Our Environment; Frameworks for Understanding	Syllabus/ Plagiarism Prequest
2	Society, Resources, Technology & the Environment	
3	The Physical Environment	Quest 1
4	No Class – Feb 13 th (See BB for Assignment); The Biosphere	
5	The Biosphere	Quest 2
6	Human Overpopulation	
7	Climate Change	
8	Biodiversity: Preserving Species, Preserving Landscapes, and Restoration Ecology	Quest 3
9	SPRING BREAK (READINGS ARE STILL REQUIRED)	
10	Environmental Health & Toxicology	
11	Food and Hunger; Agriculture, Aquaculture, and Fisheries	
12	Economic Geology and Mining; Energy: Conventional	Quest 4
13	Sustainable Energy; Air Pollution (Online); Water Pollution, Use, and Management	
14	Water Pollution, Use, and Management	Quest 5
15	Solid, Toxic, and Hazardous Waste; Sustainable Development	Quest 6
16	Ecological Economics / Environmental Policy, Law, and Planning	
17	Global Sustainability and Next Steps	Quest 7

Attendance, Makeup Policies, and Assignments: Regular attendance in lecture is expected in order for students to be successful in this course. Students are expected to be present during discussions, to turn in assignments on time, and to

take the quests online by the due date. Any information assigned/lectured on in class or assigned readings and media are fair game for assessment. If a student misses a class, it is **their responsibility** to obtain class handouts from Blackboard (BB) and notes from other students. When it comes to the videos and materials, make sure to take notes on what you read and watch. You will be quizzed on this material every couple of weeks.

Approximately 7 Quests will be conducted on BB. You can think of Quests as being a longer and more comprehensive than a quiz and shorter and less material than test. Quests are not worth as much in this course as you may be used to in other science courses (weekly assignments are worth much more overall) but still require studying. The Quests are conducted online to conserve class time for lecture and to ensure consistent studying of material. In addition, this is an environmental course and so reduction of paper usage is a high priority.

Students are expected to access quests during the open period, which is generally over a three-day period (starting on Thursday and ending on Saturday) during which a student may take the quest at any time. Quests are timed with each multiple choice or true/false question allotted 1-1.5 minutes per question (standard for any science course). Short answer questions are several minutes per question. Study guides are available for most chapters that you can use to study from.

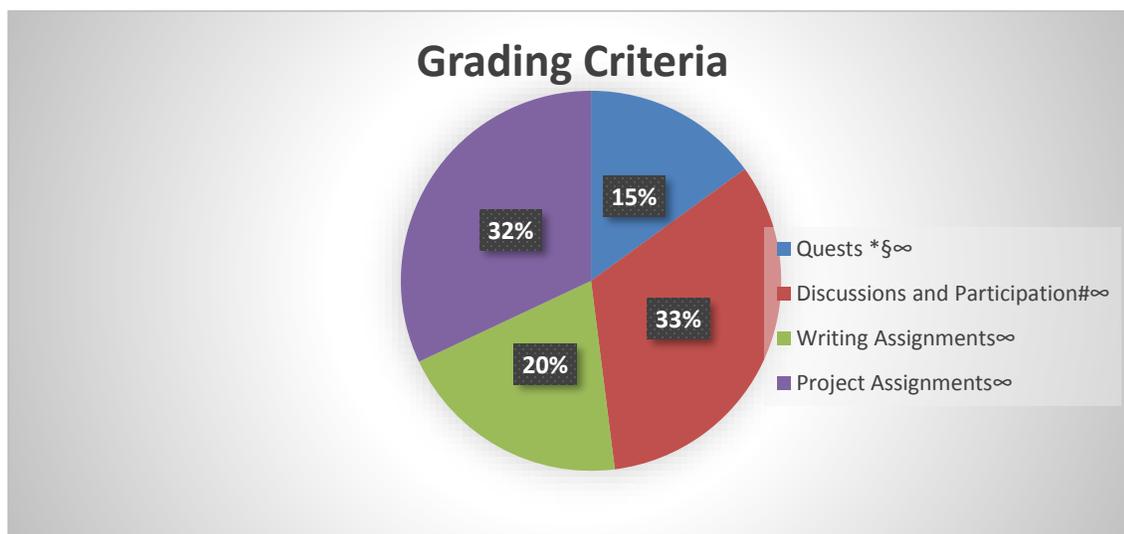
Once the quest has started, the timer does not stop/pause, even if you are booted offline or your computer crashes. Once you start the quest you cannot go back to it later – you must finish it in one sitting! Because of this, you must take the quests from a reliable computer with a strong internet connection (preferably broadband). A helpful hint is to take the quest as early as possible in the open window – if you wait until the last minute and have computer problems, there is nothing I can do for you.

Quests **cannot** be made up once the deadline has passed. **There will be no make-up quests.** The lowest quest grade will be dropped. A missed quest becomes the dropped quest grade. Each additional missed quest will be assigned a zero. In order to take the quest, you must be able to log into BB LEARN (see document at the end of this overview). As you will have multiple days to complete each quest, and there are many computers with reliable internet available to you, "computer problem" excuses will not be accepted for missing a quest or for a late or missed assignment. Saying your internet or computer "broke" is not a valid reason to miss a quest or assignment. All technical issues should be remedied in the first week of class - there will be a syllabus/plagiarism quest you will take to ensure that all problems have been resolved. If you do not have a home computer, there are computer labs throughout campus and at your own local library.

All assignments will be turned in on BB, unless otherwise stated. **Late assignments will be reduced in 10% per day. When an assignment is beyond a week late, it will no longer be accepted for credit. In-class discussions cannot be made up.** There are plenty of opportunities for students to do well in this course so I do not assign/give extra credit. Please do not ask for extra credit. The date of the final discussion will be announced during the last few weeks of the course. Class will meet during regularly scheduled lecture periods. Attendance is required at these classes. The overall goal of this class is to help you better understand the environment around you and the role of humans in the environmental equation. The assignments and discussions, therefore, are not busy work; each has a purpose and is there to help you achieve this goal.

Reminder: Late assignments will be reduced in credit by 10% per day. When an assignment is beyond a week late, it will no longer be accepted for credit. You should use a computer with a reliable internet connection and current technology for submitting assignments and quests. Quests cannot be made up.

Keeping track of due dates and times are your responsibility



¥ Letter grades will follow NCCC's standard breakdown as found in the course catalog.

¤ Incompletes will ONLY be assigned when at least 90% of the course work has already been completed. The "Incomplete" is reserved for students with emergencies or extenuating circumstances at the end of the semester.

£ Withdrawals must be submitted to the Registrar's office on or before the withdrawal date for the semester. Requests for withdrawal after the cutoff date WILL NOT be approved. Please consult the College's calendar for important dates.

The participation grade includes participating in class, working well with other students, following all directions by the instructor, abiding by the Code of Conduct for the class, and other aspects of behavior and attitude deemed important by the instructor and institution such as respectful behavior, plagiarism, etc.

* Lowest quest will be dropped. Any quest not taken will be assigned a zero and will count as the lowest quest grade.

§ Missed quests **may not** be made up.

∞ Dates for assignments can be found in the course Calendar

Blackboard (BB): This course is taught in-person but is supported by BB. BB will be utilized for correspondence and announcements. You can access BB through my.comnet.edu OR through ctccs.blackboard.com. It may take some time to get used to, but as with any learning experience you will be better off for it!

We will go over the content within the BB LEARN site the first day of class but it will be the **student's responsibility** to log in to find the readings/watch media, check for updates, read announcements, view the calendar, etc. from the first day until the last day of class. Some of you may not "like" computers but students should get used to using them in order to be successful in their career in the future. Learning the different roles of technology is part of NCCC's general education outcomes. Students will be required to review short pieces of scientific literature/multimedia for discussion in class or for assignments and these will be located on BB.

For handouts, one handout per student will be provided by the instructor and will also be posted on BB LEARN. If lost, students must print out their own copy of the handout either at home, the learning center, or the computer center.

Messages Policy: I will generally be checking BB for email/assignments at least once per day during the week and once per weekend. Therefore, I will generally respond to emails/questions within 24 hours (48 hours on the weekends). All correspondence/emails MUST be conducted through BB in the Messages tool. Please do not email my regular school account for coursework or course questions. The only time that my outside email address should be used is if BB is down.

Research: Be very choosy about the sites used to do research (for this or any course). One tip: NEVER use Wikipedia as a primary source for your research. It may be used as a starting point but since it is an open source site, anyone can contribute and rewrite, meaning that the information is not trustworthy. Wikipedia even suggests you not use their site for undergraduate research: en.wikipedia.org/wiki/Wikipedia:Researching_with_Wikipedia If you see something that seems useful in Wikipedia, you will need to find it from a credible site or source elsewhere to use it. **Assignments submitted using Wikipedia as a primary source will be assigned a reduced grade.** We will discuss this further during the first two weeks of the course.

Writing/Discussion Assignments: Students that truly understand the material then should be able to write about it and discuss it. A portion of your grade in this class will come from short in-class discussions (that cannot be made up) and writing assignments related to a section of the text, a reading, a website, or an online lecture topic that will culminate in a reflective essay on what you have gleaned about the environment from this course. I could require that you write a single 10-15 page paper for me by the end of the class. Instead, by breaking the assignments into small bits which can be reviewed, analyzed, and digested easily, the writing assignments are more manageable. Details will be given in the first week of class.

Project Assignments: A portion of your grade will involve participating in small projects regarding topics discussed in class. Details will follow a few weeks into the semester.

Proofreading: In any format, your writing reflects on you as a student and as an individual. This is not just limited to English courses – you should be mindful of your writing for any course or correspondence (email, online comments, blogs, letters), including this one. You should be taking pride in your work by proofreading and taking care to do things correctly by treating your postings as you would a formal letter or other important communication. This is not the place for shorthand or informal language, including online-speak (e.g. LOL-speak, etc.). Please proofread ALL assignments, including projects and discussion postings, before submission. Type out your sentences fully, proofread, and check out the Helpful Documents section of the course for expectations in your interpersonal communications within the course. Assignments that have excessive proofreading errors will be subject to grade reductions.

Other Policies:

Personal Responsibility: It has been said that it never hurts to ask, which in most cases is true. However, in the case of the policies mentioned above (and below), there are **no exceptions**. One of the goals of higher education is to instill personal responsibility and organization. As a student at Northwestern Connecticut Community College, YOU are personally responsible for your education, not the instructor.

The instructor's role is to deliver information and assist students in processing that information. It is also the instructor's responsibility to assess whether a student has grasped the information via evaluative methods such as assignments and quests. In higher education, it is not the instructor's responsibility to call/email students with work who have missed class. It is also not the instructor's responsibility to track down students when they have not shown up for class (online or otherwise).

It is the students' responsibility to take notes, study, be present for the material, to complete assignments, and to ask questions if information is not clear. There are also behavioral responsibilities listed in the Code of Conduct. Respect is the primary behavioral concern of any instructor: respect for other students, respect for the instructor, and respect for oneself. It is the express right of the instructor to dismiss a student who is being disrespectful to another student, the instructor, or to the class as a whole. As a result of any dismissal, students may see their grade reduced as a result of the loss of participation points for the course. In addition, students who refuse to remedy their behavioral transgressions or who are threatening to another student or the instructor will not be allowed back into class until such time as the instructor feels the student is ready to return. Keep in mind that students who do not follow these guiding principles are typically not successful in an institution of higher learning no matter where it may be.

Finally, the grade obtained by a student is not influenced by personalities or whether an instructor “likes” or “dislikes” that student. Grades are an objective and accurate representation of a **student's performance** in the course. Rubrics will be provided ahead of time, when appropriate, to clarify expectations on an assignment. Students who feel that they have an issue with the course should speak with the instructor first. If the instructor is not able to assist the student with their needs, the instructor will then guide the student to the appropriate Administrator.

Cheating: You may consult with other students, but all written work and quests, whether in rough draft or final form, must be **your own original work in your own words**. Students who are caught copying from other students or plagiarizing will receive a zero for the assignment and will be dealt with according to the college policy outlined in NCCC's Student Handbook. Cheating shall be defined as:

- Copying to any extent the work of another student
- Reusing an assignment from a previous semester
- Intentionally assisting another student on an assignment or during an examination or quest

- Having access to material related to an examination during an examination or quest
- Possessing or having access to unauthorized copies of an examination or quest
- Departing from any stated examination conditions

Plagiarism: The **American Heritage Dictionary** defines plagiarism as "To appropriate passages or ideas from another and use them as one's own." Plagiarism involves:

- Submitting another person's work as one's own
- Submitting work from any source that is not properly acknowledged by footnote, bibliography, or reference within a paper
- Submitting work pieced together from phrases and/or sentences from various sources without acknowledgement
- Submitting work with another person's phrase(s) rearranged without acknowledgement
- Submitting work that uses any phrase, sentence, or stylistic mannerism without acknowledgement
- Omitting quotation marks from any directly quoted material
- Failure to use three dots (...) to indicate omission of one or more words
- Any other actions deemed to be plagiarism by the faculty

You must always rephrase or rewrite (paraphrase) the information that is not your own original idea unless you are allowed quotes in your assignments. **In this class, however, quotes are not allowed in assignments.** To do otherwise it considered plagiarism and is illegal and unethical. Please go to our BB shell to find more information on plagiarism.

WRITING GUIDELINES

- Do not plagiarize:
 - "Plagiarism is using the words, ideas or facts from a source without giving proper credit to the source for the information and wording. As paraphrases are assumed to be your own wording, if your phrasing is too close to that of the original passage you are, in effect, taking the source's words without crediting them as such. Plagiarism will not only hurt your credibility as a writer; most academic institutions also have strict policies against it."

<http://writing.colostate.edu/references/sources/working/pop8d2a.cfm>
 - Plagiarize \ˈplɑː-je-,rɪz also j - -\ vb -rized; -riz-ing vt [plagiary] : to steal and pass off (the ideas or words of another) as one's own : use (a created production) without crediting the source vi: to commit literary theft: present as new and original an idea or product derived from an existing source - pla-gia-riz-er n Webster's New Collegiate Dictionary 9th ed, (Springfield, Ma: Merriam 1981, p. 870).
 - You must always rephrase or rewrite (paraphrase) the information that is not your own original idea unless you are allowed quotes in your assignments. To do otherwise it considered plagiarism and is illegal and unethical. Please go to the NCCC Library's online site on plagiarism and paraphrasing to see examples of what to do and what not to do: <http://www.nwcc.comnet.edu/library/documentation.htm#Plagiarism>
- Research: Be very choosy about the sites you use to do your research/glean information from. One tip: NEVER use Wikipedia as a source for your research. You can use it as a starting point but as it is an open source site, anyone can contribute, meaning that the information is often at least partially incorrect. Wikipedia even suggests you not use their site for undergraduate research: en.wikipedia.org/wiki/Wikipedia:Researching_with_Wikipedia
- No quotations should be used in papers of the size required for this class. Paraphrase the information in your own words. If you use quotations your grade will be reduced.
- Do not use contractions in your writing in this class! You should be practicing a more formal style. If you do use contractions, your grade will be reduced.
- You are writing for a college course so proofread, proofread, and proofread. There is no excuse for spelling, grammatical, or punctuation at this point in your life and you will be marked down if there are errors.
- PROOFREADING: Either yourself or someone else must sit down with the entire paper and read it over for clarity and flow. Use spell-check and grammar-check. Use the tutoring center.
- All works must be cited correctly in the text and in a Works Cited section. You MUST use CSE style citations using the formats provided online through the NCCC library's website. If the citations are not done correctly your grade will be reduced.