

ENVIRONMENTAL SCIENCE – NRE 1000 – SPRING 2016

Department of Natural Resources and the Environment

SYLLABUS

Instructor: Dr. Morty Ortega, Associate Professor, Wildlife Ecologist	Credit hours: 3
Office: W.B. Young Building – Room 222	Meeting time: Tu & Th 9:30 – 10:45pm
Office hours: use the Advising link http://www.advapp.uconn.edu/ to make an appointment. Look for me under the CANR/RHSA (Agriculture and Natural Resources)	Room: 100 W.B. Young

Email- Please use exclusively mortynre1000@gmail.com email address to contact me. Not all messages will be answered via email, some answers that benefit the rest of the students in the course will be given in class.

Catalog Description

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. General Education Content Area 3: Science and Technology.

HuskyCT

Course materials (Assignments, Assessment information, lecture schedule, etc.) will be posted on the HuskyCT, check it often.

Course Objectives

Upon completion of the course, the student should be able to:

1. Demonstrate knowledge of natural systems and gain understanding of some of the major environmental problems at the local and at the global level
2. Gain appreciation for and knowledge of various disciplines in natural resource conservation
3. Understand how professionals in the field are involved in coping with and solving problems.

Course Textbook

The required textbook for this course is: *Andrew Friedland, Rick Relyea, and David Courard-Hauri. 2012. Essentials of Environmental Science.* W. H. Freeman; First Edition, 384 pp. **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 the site: <https://www.vitalsource.com/products/essentials-of-environmental-science-friedland-andrew-v9781464120497>

Course Requirements

Class Participation

To be able to participate in the class... your attendance is extremely important. Please let me know in advance if you are not able to be in class with us, thanks! Participation will be measured with PSA's and ICA's, see below for further description.

Academic Honesty

Academic honesty is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards academic dishonesty as an extremely serious matter, with serious consequences that range from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, or collaboration, consult the course instructor.

Cell Phones

Please **turn off** all cell phones before entering the classroom. Under no circumstances are you to answer a cell phone during class. Any student that has a cell phone at their desk that audibly rings or any student who uses a cell phone during an examination or quiz will **receive a zero** for that examination or quiz.

Please no texting in class! Trust me... I will stop you from continuing such practice!

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Evaluation

Assignments

There are 10 assignments throughout the semester. Some assignments are more involved, so there they have higher value. Basic information is included in this syllabus, but more detail and background information on the assignments will be discussed in class and posted on HuskyCT.

Participation Short Assignments (PSA)

There will be 10 short assignments given in class, to be answered in HuskyCT. Each assignment is worth 10 points. To complete these assignments they have to include 4 references from the Internet in form of the URL (example: <http://www.greenthumb.com/greenvegetables.htm>). The answer to these PSA's should also contain **your personal comment** about the issue researched. If no comment has been made, points will be taken off from the grade. There may be more than 10 PSA's, but the most that you can get is 100 points, or there may be less than 10 PSA's but with different points that may add to 100 points.

In-Class Assignments (ICA)

There will be 10 assignments to be worked out in the classroom in small groups. Instructions will be given in the class. Again there will be more or less ICA's depending on the point value of them.

Exams

There are two exams during the semester each is worth 100 points. The final exam is worth 200 points at a date chosen by the university. Each exam is about 80 questions, but the final exam is 100 questions. The exams are based 70% on the book readings and 30% from the class discussions, PSA's and ICA's. Students are responsible for all assigned text material and all the material presented in class. The Final Exam is not cumulative!

See information about Final Exams at the end of the Syllabus from the Deans of Student Office

Grading

10-Assignments (variable points)	400	The following breakdown will be used to assign final grades:							
10-Participation short assign. (PSA;10 pts each)	100	Points	Grade	Points	Grade	Points	Grade		
10-In-class participation assign (ICA;10 pts each)	100	1000-940	A	899-866	B+	799-766	C+	699-666	D+
2-Exams (100 points each)	200	939-900	A-	865-833	B	765-733	C	665-633	D
Final exam	200			832-800	B-	732-700	C-	632-600	D-
TOTAL	1000	<i>With less than 599 points you have failed the course! Potential extra-credit points may be given. There is no grade curving either!</i>							

The grades shown in HuskyCT are for your reference only; they are not the official grades, which I keep on my computer. At the end of the semester not all grades will be shown in HuskyCT, so make sure to reference this syllabus when checking your final grade. Thanks.

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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.**

Assignment	What needs to be done	Due Date	Points
1	<p>Inventory of my personal resources Each student is required to make a list of all of the resources that he/she considered to own. These resources have to be classified within the following categories:</p> <ul style="list-style-type: none"> • Required: these items are of extreme need (let's say survival). • Luxury: you have no idea why you even have these resources. <p>The survey is located in SurveyMonkey: https://www.surveymonkey.com/s/SPSem2016</p>	Jan 28	60
2	Working with data: Human Population. Please see description in HuskyCT	Feb 4	20
3	Working with data: Kaibab deer. Please see description in HuskyCT	Feb 11	20
4	Working with data: Extinction of species. Please see description in HuskyCT	Feb 18	20
5	<p>Personal water use. You have to measure the water that you spend in a week. Please use the estimates given by the U.S. Geological Service:</p> <ul style="list-style-type: none"> • Bath: 50 gallons • Shower: 2 gallons per minute • Teeth brushing: 1 gallon • Hands/face washing: 1 gallon • Face/leg shaving: 1 gallon • Clothes washing (machine): 10 gallons/load • Toilet flush: 3 gallons • Glasses of water drunk: 8 oz. per glass (1/16th of a gallon) <p>The data should be entered in a SurveyMonkey page given in the HuskyCT page.</p>	Feb 25	60
6	Working with data: Livestock. Please see description in HuskyCT	Mar 3	20
7	Working with data: Power. Please see description in HuskyCT	Mar 10	20

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8	<p>My new car! As a present for graduation (or getting married or simply because they are cool !) your parents are giving you a BRAND NEW car. They are not sure how much they can afford, but they ask you the following:</p> <ol style="list-style-type: none"> 1. It should be a brand new car. No used ones!!! 2. They want for you to get an environmentally friendly car. Meaning that it has a small environmental footprint and great energy economy. They are not too convinced with electric cars or other newer energy alternatives, but they are willing to accept for you to buy a hybrid car 3. The cost of the car should be between \$15,000 and \$30,000 <p>Before receiving the money, you should provide them a list of FIVE cars with the following characteristics:</p> <ol style="list-style-type: none"> 1. Make and model 2. Price 3. Fuel economy – city and highway 4. Greenhouse Gas Emissions 5. Tank size 6. Car environmental footprint (if available) <p>Please provide the list of the six characteristics for 5 cars. Submit the information in HuskyCT.</p>	Mar 24	60
9	<p>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. The best way to do this is to talk with your relatives in town. A visit to the town hall perhaps could provide some info. The local paper may also have information. Do not forget to check the internet for information.</p> <ul style="list-style-type: none"> • Once you have found out the source of the environmental problem you must provide the most information possible. At the same time you should present the potential solutions. • This assignment should be between 1,000 and 1,200 words, this is not including any graphs, photos, tables, or literature cited. • All information must have come from some specific source. So please provide the information from such source. • Submit the paper as an attachment in HuskyCT. 	Mar 31	80

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10	<p>Car economy. From February 1st until April 15th you are required to record the expenses on your car. If you do not own a car, your parents or friends can do it for you! You will be given one data sheet, the data sheet will be also as pdf in HuskyCT in case you need more. You 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.</p> <ul style="list-style-type: none"> • Data to collect: <ul style="list-style-type: none"> • amounts of gas used by the car, • odometer data at time of fill up, • costs associated to gas, • costs associated to oil changes and repairs. • With the data in your hand you will have to provide an analysis of it by calculating the economy of the car(s). • Results will be submitted either in HuskyCT or SurveyMonkey. The information about where to submit will be given in class. • The analyses of the data is worth 20 points. • You need to submit the data sheet(s) in class on April 21st. 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. 	Apr 21	40
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Environmental Science – NRE 1000 – Spring 2016 – Lecture Schedule **(subject to change)**

Month	Date	D	Topics	Book Readings
Jan	19	T	Introductions	
	21	Th	Syllabus, Topics & Schedule, Assignments, and... so what are the environmental issues of the planet today? What is science?	Ch 1. Introduction to Environmental Science
	26	T	Let's talk about people	Ch 5. Human Population Growth
	28	Th	Do we really have that many people?	
Feb	2	T	Linking people and the environment	
	4	Th	What is the environment?	Ch 2. Matter, Energy, and Change
	9	T	Keeping it simple: biochemical cycles	Ch 3. Ecosystem Ecology and Biomes
	11	Th	Basics of ecology: ecosystems	
	16	T	Basics of ecology: ecosystems/biodiversity	Ch 4. Evolution, Biodiversity, and Community Ecology
	18	Th	Basics of ecology: biodiversity	
	23	T	First Exam (Chapters 1 to 5)	First Exam
	25	Th	Let's get dirty! And talk about soils!	Ch 6. Geologic Processes, Soils, and Minerals
Mar	1	T	Did anybody mention food?	Ch 7. Land Resources and Agriculture
	3	Th	Food!	
	8	T	Water... a plentiful element?	Ch 9. Water Resources and Water Pollution
	10	Th	More on water... that help to grow food	
	14-18		Spring Break! Time to fly south!	
	22	T	More links people & environment: fish for lunch!	
	24	Th	Non-renewables	Ch 8. Nonrenewable and Renewable Energy
	29	T	The thick smog of the mornings!	Ch 10. Air Pollution
	31	Th	Second Exam (Chapters 6-10)	Second Exam
Apr	5	T	... it seems that the climate is changing? Isn't?	Ch 14. Climate Alteration and Global Warming
	7	Th	Global Warming... where are the polar bears going?	
	12	T	Waste!	Ch 11. Solid Waste Generation and Disposal
	14	Th	Ecotoxicology!	Ch 12. Human Health Risk
	19	T	Keeping it forever going!	Ch 13. Conservation of Biodiversity
	21	Th	Sustainable environment... what do you mean?	Ch 15. Environmental Economics, Equity, and Policy
	26	T	Is the economy good for the environment?	
	28	Th	Last day of class. Connect to Environment	
May	TBD	?	Final Exam (Chapters 11-15)	FINAL Exam – TBD

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

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ADA Statement

If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance, please notify the Center for Students with Disabilities, located in the Wilbur Cross Building, Room 204, 233 Glenbrook Road, Unit 4174, Storrs, CT 06269-4174, Voice: 860-486-2020, TDD: 860-486-2077. Website: <http://www.csd.uconn.edu/>

The University's Policies and Procedures Regarding Students with Disabilities, published in the General and Graduate bulletins, includes procedures for accessing testing accommodations. Students should discuss their specific needs for testing accommodations (e.g., extended time; separate location; use of word processing) with CSD staff within the first two weeks of each semester. It is in the student's best interest to self-identify to professors at the beginning of the semester or course instructor immediately. Reasonable efforts will be made to accommodate your special needs.

Civility Statement

Because this class needs to be a participatory community if students are to fulfill their potential for learning, people who disrupt the community by their words or actions (rude, sarcastic, obscene or disrespectful speech or disruptive behavior) will be removed from the class. In order to achieve our educational goals and to encourage the expression, testing, understanding and creation of a variety of ideas and opinions, respect must be shown to everyone.

Student Conduct Code

All students have the responsibility to uphold the University of Connecticut *Student Conduct Code*. Violations of the *Student Conduct Code* related to this course will be brought to the attention of the student and possibly the Dean of Students with appropriate actions. Copies of the *Student Conduct Code* can be obtained at <http://community.uconn.edu/the-student-code-preamble/>

Storrs Campus Spring 2016 Finals Rescheduling - Bunched Finals

Students who have "bunched finals" should go to the i-Center at the entrance to Wilbur Cross between April 1st and April 24th to request a change. The deadline for requesting a change is April 24th. Listed below are examples of what is considered to be "bunched finals". Please note, it is the middle final that will be rescheduled.

	Monday	Tuesday
8:00am	Exam	
10:30am		
1:00pm	Exam	
3:30pm	Exam	
6:00pm		

	Monday	Tuesday
8:00am		
10:30am		Exam
1:00pm	Exam	
3:30pm	Exam	Exam
6:00pm		

Extenuating Circumstances

Students with "extenuating circumstances" which may create a finals conflict are encouraged to visit the Dean of Students Office, to speak to a staff member as soon as possible. Supporting documentation will be required. Staff may allow students to reschedule a final due to an unavoidable circumstance, such as religious observances, previously scheduled medical procedures/appointments, attendance at a funeral, or other ceremonies in which you are directly involved in the event.

	Monday	Tuesday
8:00am	Exam	Exam
10:30am		
1:00pm		
3:30pm	Exam	
6:00pm	Exam	

	Monday	Tuesday
8:00am		
10:30am	Exam	
1:00pm	Exam	
3:30pm	Exam	
6:00pm		

Illness During Finals Week

Student Health Services (SHS) must see students who are sick during the finals period for verification of illness. SHS will provide this information to Dean of Students Office and we will inform the instructor(s) of permission to reschedule the final. Students who are ill and see SHS do not need to also visit Dean of Students Office.

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Dean of Students Office  
Wilbur Cross Building, Rm. 203  
233 Glenbrook Rd., Unit 4062, Storrs, CT 06269-4062  
Phone: 860-486-3426      Fax: 860-486-1972      Email: [dos@uconn.edu](mailto:dos@uconn.edu)  
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