

Chapter 1 : Course Syllabi & Websites | Department of Environmental Studies - UC Santa Barbara

Introduction to Environmental Studies 1. ENVIRONMENTAL STUDIES Definition, scope & Multidisciplinary nature, Need for public awareness, Introduction to Green Technology 2.

Introduction to Environmental Science The first unit of environmental science is intended to give students a feel for the types of issues that will be covered in the course. Certain fundamental concepts that will reappear multiple times throughout the year will also be taught here. A special emphasis is placed on the root causes of many of the environmental issues discussed through the course, such as overconsumption of resources, pollution, and loss of biodiversity. Additionally, the importance of developing a sense of environmental ethics is a central theme. The famous Hetch Hetchy debate is used to frame much of this lecture. This is an outline of the major lessons covered within this unit, their suggested sequence, a time estimate for each topic, and important objectives and vocabulary covered by this unit. Links are provided for any website, video clip, worksheet, or lecture Powerpoint needed by the instructor. This unit plan is primarily written for instructors of upper-level high school students and introductory college-level students. This Powerpoint presentation is designed for the first class of a survey Environmental Science course. The lecture briefly covers many of the fundamental ideas and issues behind the discipline and serves as a good preview for the material covered in the rest of the course. The Powerpoint begins with an introductory narrative to frame the rest of the material. In this case, I begin with the events leading up to the debate surrounding and eventual construction of the Hetch Hetchy dam in Yosemite National Park. This is a great example of an early clash between two distinct types of environmental ethics -- the resource conservationists and nature preservationists. The rest of the lecture is spent discussing some of the broad environmental issues -- resource conservation, pollution, developed vs. This lecture is based on material from Environmental Science by G. Environmental science, renewable resources, nonrenewable resources, pollution, biodiversity, environmental ethics, Tragedy of the Commons, developed countries, developing countries, sustainability. Taking efficient notes can be a big challenge for many students, especially when working from a Powerpoint lecture. This outline gives students a means to take notes that guides them toward important concepts and avoids the pitfalls of writing word-for-word or simply not taking notes at all. The outline is written as a series of questions, fill-in-the-blanks, or diagrams. A good way to be introduced to your students and the background knowledge they bring to the course is through a pretest. Each of the major units typically covered in an introductory environmental science course is addressed in this pretest. One way to incorporate this into the first day of class is to first allow students to take the pre-test, then go around the room one at a time, have the students introduce themselves, and ask them to give their answer to one of the questions. This will provide an opportunity to break the ice, encourage some basic-level discussion on a few important environmental issues, and provide some insight into the interests and backgrounds of everyone enrolled in the course. Where Was My Shirt Made? Many consumer goods in developed countries are produced in the developing world -- often in unsafe and unhealthy working conditions, for minimal pay. This activity seeks to give students insight into one category of these products -- our clothing. Each student will find out what country their shirt was made in, then do some simple research to determine the gross domestic product per capita of that country and where it is located in the world. Most of the decisions and problems faced by environmental scientists do not have clear-cut answers, and may involve economic, personal, and ecological effects. This writing prompt has students take the role of Teddy Roosevelt in the early part of the 20th century. San Francisco is increasing an rapidly increasing population and does not have the water supplies to meet their needs. The city would like to dam the nearby Tolumne river, but the Hetch Hetchy valley it runs through is on federal land. Environmental ethics, environmental history, pragmatic resource conservationism, aesthetic nature preservationism, John Muir, Teddy Roosevelt, Hetch Hetchy valley, dam construction, water resources Journal Writing Entry - Environmental Ethics: During his interview, he announced that Dow Chemical would be accepting full responsibility for the cleanup, remediation, and victim restitution from the Bhopal disaster of Environmental ethics, morality, economics, Bhopal, developing countries, hazardous waste. The Lorax TV movie version is

really all about the tragedy of the commons. The entrepreneurial Once-ler arrives in a diverse natural area that must be a commons -- there is no ownership by anyone nor is there any regulation. The Once-ler does what often happens to commons, he overexploits it for short-term gain. While this is highly successful for him initially, in the long run, the land becomes polluted, deforested, and completely worthless. Environmental ethics, anthropocentrism, resource depletion, pollution, biodiversity, Tragedy of the Commons. One of the demands of a consumer society is to make the goods as cheap as possible. When prices are cut in this way, there are unseen human and ecological costs. This documentary does a good job showing the impact of the powerful retailer Walmart on both towns within the United States and the countries in which the products they sell are produced. This is a worksheet of questions for students to answer as they watch the documentary. Environmental economics, environmental ethics, economic cost, human cost, environmental cost, developed countries, developing countries, workers rights. As members of developed countries, we are often not even aware of the vast amount of resources we consume, especially in comparison to other countries. This documentary explores the materialistic nature of our society and its impacts. The worksheet contains questions for students to answer as they watch. Environmental economics, environmental ethics, overconsumption, resource use, developing countries, developed countries. Once the instruction for the unit is completed, students can complete this study guide to aid in their preparation for a written test. The study guide is divided into two sections: The vocabulary is taken directly from the lecture, sequentially. The short answer questions are meant to model the type they may see on the exam.

Chapter 2 : ENVS Introduction to Environmental Science

A scientific study of the natural world and how it is influenced by people. Major topics include: food, energy, human population, biodiversity and global change.

Explore the nature of environmental problems and gain an overall understanding of the complexity of these problems LAC, gtP. ENST , can be taken concurrently. Overview of the Sustainable Development focusing on its origins and meanings in both theory and practice. A geographic focus on countries in the Global South, exploring how sustainable development policies and programs have impacted levels of poverty and inequality, use of natural resources, as well as rural and urban livelihoods. Examine interrelationships between human behavior and the environment. Review personal, social and structural dimensions of everyday life relating to the environment. Understand environmental problems and consider alternative behavior models. Discuss applications to transportation, home and industry. Taught by the Physics department. LAC, gtP 3 Study the chemistry of natural waters, the atmosphere, and geosphere and the chemicals used for agriculture, industry, home, and energy production that pollute them. This course takes an interdisciplinary approach toward understanding modern and traditional agriculture, and the ways in which these agricultural forms both clash and coalesce. Learn about the water cycle and how water moves through an environment. Students will build an understanding of how to identify pollutants within water and be able to assess different ways in which contaminants can be eliminated. The environmental consequences of their use and abuse will be emphasized. Explore the nature of environmental conflict and work toward understanding the range of processes and skills used to resolve them. Students will learn what attitudes, values and ethics humans have in terms of the natural world. LAC 3 Use case studies to explore a general overview of commerce, economics, and business as it relates to the environment and human interactions. An exploration and analysis of the historical development of perceptions and worldviews about the environment and the natural world using the United States as a case study. This course examines principles, procedures, methods, and applications of environmental impact assessment. Students will examine the strengths and weaknesses of economic theory in analyzing the seriousness of resource and environmental issues facing society. Examine selected environmental issues, including climate change, environmental degradation, and resource depletion, focusing on the physical processes underlying these problems and how human activities contribute to environmental problems. Analyze major areas of environmental pollution: Discussion of supply and demand, quality and political issues. Relationship to Colorado and local situation. Can also be taken as ECON Understand the leadership role of the individual and groups in building sustainable communities that enhance and capacity building for positive societal change. Economic, scientific, philosophic and religious attitudes emerge from attitudes about nature. Do these influence human treatment of natural things? Can be taken as ECON Explore alternative approaches to meeting transportation, domestic power and heating, food production and waste disposal needs on the personal and community levels. Exploration of human perception as it adapts to the built environment, including theories of environmental psychology. ENST or consent of instructor. Exploration of materials used in the built environment including: Properties and characteristics of a material, sustainable features, history of use, fabrication process, common uses for the material, and installation methods. ENST or permission of the instructor. Exploration of the built environment including the characteristics of sustainability in: Individuals and small groups analyze and present problems. Repeatable, maximum concurrent enrollment is two times. Includes an examination of the role humans have played in shaping those patterns. One field trip required. Determinants and consequences of behavior and response to environmental extremes, technological emergencies, and acts of mass violence. Permission of Environmental Studies coordinator. Practical experience and training in areas related to the environment. Credit hours and nature of experience arranged individually. Repeatable, maximum of 15 credits. Consent of ENST coordinator required. Experience in assisting in instruction of an introductory environmental studies course. Repeatable, maximum of 6 credits. Give students experience in community engagement and service learning through a real community immersion process. Repeatable under different subtitles, maximum of nine credits.

Chapter 3 : University of Northern Colorado - ENST - Environmental Studies

This program serves as an introduction to the interdisciplinary field of environmental studies, using natural and social sciences, as well as humanities to understand and address current environmental challenges.

The prevailing theoretical self-concept of science implies that the sciences cannot make value judgements with the authority of their rationality. They deliver so-called neutral figures, information or explanations which are to serve as the unbiased basis for decisions on the broadest variety of interests. Which interests they select, however, on whom or what they project causes, how they interpret the problems of society, what sort of potential solutions they bring into view – these are anything but neutral decisions. Beck An alternative view see quote above contends that scientific knowledge is never definitive but is rather the product of an historic, evolutionary process which is continually open to re-interpretation. This qualified model of knowledge is consistent with the scientific method itself, which maintains an attitude of skepticism at its core. In this exercise we will examine the quintessential environmental issue of pollution, and the pivotal role that DDT has played in the formation of this issue and of the environmental movement more generally. This exercise will expose you to the complexity and the social dimensions of environmental issues, as well as introduce you to a set of tools that will help you to examine other societal issues. In essence, the viewer can follow the rise and fall of particular words throughout the period to for over 5 million books. For the purposes of this exercise we assume that the relative frequency of words or word strings matches societal utilization of particular terms, and thus indicates interest in these terms through time. Your task is relatively straightforward: There is no right or wrong answer in this exercise, only those which are better researched, and more thorough. **EXERCISE** In this assignment your submission will include a combination of short answers, an annotated bibliography, as well as a short essay that synthesizes your results see Step 4. I would encourage you to begin using a bibliometric database such as ZOTERO to keep track of your research It makes things much easier. Start by visiting the Google Ngram Viewer site <https://books.google.com/ngrams/>: Keep in mind that you will be asked to label the diagram e. A-F according to the chronological position of key events e. You will be asked to identify at least 5 eventsviii, but definitely no more than Much of the information regarding environmental issues is often held within the popular media, or in various institutional reports e. Keep in mind the inherent bias associated with each resource. Check the scientific literature for critical articles that help explain the Timeline. Using an online database will also facilitate your access to these articles. Keep in mind that this exercise is not intended to be an exhaustive search. Lags do occur between the publication of a particular scientific article and its uptake by the policy community for instance. In essence these are the articles that people would have had available to them in the given period. Deliverables – what you need to provide. Zotero should be able to format this for youxix. Is it possible to read all these articles? What do you think is reasonable? In other words, what are the cumulative number of articles identified by SCOPUS before each event you have identified? There are resources online that may help you write an annotated bibliography such as: Naturally you will have to explain what DDT is and how it has been used. In the overview you will of course refer back to the DDT Timeline you have created and you will cite the resources you have created annotated bibliographies for. Marks are allocated as follows:

Chapter 4 : Introduction to Environmental Science - Free Course by The Ohio State University on iTunes U

Science (): *xix Be consistent in your citation style - for instance you can use the 'American Psychological Association, 6th Edition' citation style that is one of the outputs from Zotero.*

University with graduate programs, including doctoral programs Course Context: This is an introduction course and serves as one of the required sciences course for students of all major. The number of registration for this course increases every year and offered every semester. Outstanding high school, freshman, sophomore, junior and senior students register for this course. This course is a multi-disciplinary science course within chemistry, ecology, hydrology, energy and environment. The course includes lecture class, six indoor labs, one field lab and group project. Students perform an experiment on acid and base reaction, water quality, air pollution, toxic analysis, and nutrient analysis. Students learn how to write a lab report, analyze and interpret chemical analysis. The objective of this course is to make students familiar with the environmental issues. Students will able to understand about acid rain deposition, invasive and exotic species, large scale deforestation, anthropogenic influence on atmospheric conditions, and different kind of pollution. This course would enable students to be aware of and to learn about the burning topics related to the environment from across the globe. Students perform experiment and will have hands on experience in identifying and analyzing different environmental problems related with air, water pollution, and environmental degradation. Students identify environmental problems on campus and propose an action remedial plan and present the findings with presentation and a complete a term paper. This course was designed from the multi disciplinary view of Earth and Environment department. The course is designed to give awareness and exposure to students to identify environmental problem and propose a solution to the problem. We can make a difference if we come together and act in a way so that we can not only enjoy a healthy environment, but also preserve it for the future generations. Assessment of the course is punctuated by lab report, quiz, exam and term paper. The students submit a comprehensive lab report and get feed back from instructors to improve their writing ability every week. The course content of the course is assessed via quiz and exam. Students also submit a term paper and along with presentation. This course is offered every semester in FIU. The objective of this course is to make students familiar with the environmental issues around us. The environment that we see and feel around is being polluted not only in our immediate surroundings but also on a national and global scale. Large scale deforestation, anthropogenic influence on atmospheric conditions, pollutions in every form, and many more have not only endangered the environment, but also have threatened human and animal lives. This one credit laboratory course is an introduction to environmental science and sustainability EVR L. Students will have hands on experience in identifying and analyzing different environmental problems related with air, water pollution and environmental degradation. Furthermore, students will learn about the interdependence of ecosystems such as the impacts of excessive fertilizer or nutrient usage in agricultural systems, which can result in both surface and ground water pollution.

Chapter 5 : Introduction to Environmental Studies : Environmental Studies : Courses : Athabasca University

Environmental Science It is an interdisciplinary academic field that integrates physical and biological sciences to address the environmental problems. Environmental Engineering.

Course content will be delivered using lecture presentations and videos. Carmen will be used to complete quizzes, exams, and other assignments. Other resources, such as u. Class Schedule Lecture topics subject to change. However, mistakes such as typographical errors may occur on occasion. Professor Lower will address any errors on this syllabus during lecture. The schedule shown above is tentative and will likely change throughout the semester depending on how quickly or slowly we cover the material in class. Textbook recommended resource; read the assigned textbook chapters before coming to class Environmental Science for a Changing World, 1st Edition or 2nd Edition or 3rd edition , by Houtman, Karr, and Interlandi, published by W. This textbook is available in two different formats: To purchase the textbook visit one of the following sites: Or you can purchase or rent the textbook from www. Some exam questions will be taken from the assigned readings of this textbook or additional class assignments. I will not have time to lecture on every topic that is assigned from the textbook. However, you should read and understand the assigned pages whether I have time to present them during lecture or not. You will NOT come to the classroom to take the exam. Rather, you take the exam from a location of your choosing that has Internet connection e. A significant number of exam questions will come from material presented in the lecture. Additional material will be drawn from the textbook, assigned readings and videos. Each student must complete the exam on her or his own. You are NOT permitted to receive assistance from anyone else during the exam. You are NOT permitted to take the exams as part of a group. You ARE permitted to use your own lecture notes and slides during the exam. Additional details will be provided in class. There are NO make-up exams except for valid reasons e. If you are sick, you MUST have a note signed by your medical doctor i. Otherwise, you will receive a zero on the exam. Lower will determine if your excuse is valid. Approved make-up exams will consist of multiple choice, short-answer and essay questions. An approved make-up exam will NOT be administered online but rather will be taken in person with paper and pencil. Quizzes Approximately one quiz will be given every other week. Quizzes will be announced on Carmen. Many of these questions will be based on assigned readings and videos. You will take these quizzes online using Carmen. In some semesters, Dr. Lower will replace the project with 4 assignments. Lower determines the project type and his choice will be reflected in your unique course syllabus. First, you must pick one topic in the field of environmental science to focus upon. Next, you should read a minimum of 10 articles from well-respected sources see example listed below and on Twitter OSUEnViRo , which are related to your topic. A minimum of 6 of these articles must be from primary sources journals. Lower will provide more details about this project in class. Scientific Poster Presentation details will be provided in lecture You will design, construct, and present a scientific poster to your classmates. First, you must pick a topic related to environmental science. Next, you should read at least 10 articles from well-respected sources see example list below or use any of the sources that OSUEnViRo is currently following on Twitter , which are related to this topic. After reading these articles, you will design and construct a poster describing the topic. For examples visit go. More details will be provided in class. The insight should be based on published research that you read. Detailed information will be provided for each assignment. You can subscribe to this class at <https://www.athabasca.ca/education/learning/online/online-classes/online-classes> This material is free. EDU A class page has been established for the virtual poster symposium. Details on the symposium will be given in lecture. Visit the class news page at <https://www.athabasca.ca/education/learning/online/online-classes/online-classes> Students understand the basic facts, principles, theories and methods of modern science. Students learn key events in the development of science and recognize that science is an evolving body of knowledge. Students describe the inter-dependence of scientific and technological developments. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world. Academic Misconduct It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. Instructors shall report all instances of

alleged academic misconduct to the committee Faculty Rule For additional information, see the Code of Student Conduct [http:](http://) Students with Disabilities Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. Announcements and news items will also be posted on Twitter: Lower has created a Gmail account specifically for this class: Lower will use your OSU email account to communicate with you. While many of you have other email accounts through services such as Goggle, Yahoo, or Hotmail, Dr.

Chapter 6 : Aurum Science: Introduction to Environmental Science Resources

Overview. ENVS introduces students to the field of environmental studies and provides them with basic information about a variety of environmental issues, concepts, debates, events, and actors or thinkers.

Chapter 7 : Introduction to Environmental Studies - Rapid Essay Researchers

Environmental sciences is a vast and multidisciplinary science that involves the study of natural resources of land, water, and air. Introduction to Environmental Sciences comprehensively covers.

Chapter 8 : Course Overview | Introduction to Environmental Science

Chapter 1: Introduction to Environmental Science This flashcard set includes the vocabulary words and definitions from Chp 1: An Introduction to Environmental Science (Essential Environment 3E by Withgott and Brennan,).

Chapter 9 : Introduction to Environmental Science Lab

Introduction to Environmental Science Powerpoint Lecture. This Powerpoint presentation is designed for the first meeting of a survey-level Introduction to Environmental Science course.