University of North Texas at Dallas Spring 2013 SYLLABUS

Course Abbreviation/Number/Title/Semester Hrs BIOL1132D : Environmental Science 3Hrs

| BIOL1132D : Environmental Science 3Hrs | | | | | |
|---|----------------------------------|---|---|---|--|
| Depa | rtment of | Life and Health Sciences | Division of | Liberal Arts and Life Sciences | |
| • | | 1 | • | | |
| Instructor Name: Dr. | | Dr. Aubrey Frantz | r. Aubrey Frantz | | |
| | | Room 251, Building 2 | | | |
| Office Phone: 97 | | 972-338-1523 | 72-338-1523 | | |
| Email Address: au | | aubrey.frantz@unt.edu | brey.frantz@unt.edu | | |
| Office Hours: T 2:00-4:00 | | | | | |
| | R 2:00-4:0 | | | | |
| | | ed another time, please conta | ct me by email) | | |
| Classroom Loca | ation: Fo | ounders Hall 240 | , | | |
| Class Meeting D | Days & Time | es: | TR 11:30-12 | :50 | |
| | | · | | | |
| Course Catalog Description: | scie poll Em Incl Ma | erdisciplinary approach to un ence including critical scienti lution, global climate change phasis on how these concept ludes laboratory. May not be y be used to satisfy a portion eversity Core Curriculum. | fic thought, biodive e, resource consumpts affect and are affect counted towards a | ersity, resource management, otion and population growth. ected by human society. I major or minor in biology. | |
| Proroquieitoe: | None | | | | |
| | | 2D Laboratory | | | |
| oo requisites. | _ DIOL 1 102 | - Lastiatory | | | |
| Required Text: | | <u>Visualizing Environmental Science.</u> LR Berg and MC Hager. 2009. John Wiley and Sons, Inc. NJ. | | | |
| Lab Manual: Environmental Science Laboratory and Field Activities. MK King et al. 2006. Kendall/Hunt Publishing Co. | | | | | |
| Access to Learning Resources: | | phone: (972) 78 web: http://www UNT Dallas Bookstore phone: (972) 78 | v.unt.edu/unt-dallas/li e: | brary.htm | |

Course Goals or Overview:

The goal of this course is to introduce students to environmental science and to give students the background information needed to critically think about current environmental issues. Topics will include basic ecology, a review of environmental policy and resource management theories. The course will include discussions of current environmental and conservation challenges. Students will be willing and able to voice and defend their opinions on these subjects as well as be respectful of the opinions of others.

| Learning Objectives/Outcomes: | | ng Objectives/Outcomes: | At the end of this course, the student will | |
|-------------------------------|---|------------------------------|--|--|
| | 1 | Be able to explain the confl | icting biological, social, economic and needs of humanity and other living | |

| | organisms |
|---|---|
| 2 | Demonstrate the ability to assimilate and critically think about environmental issues, environmental policy |
| | and legislation |
| 3 | Define the role of organisms in their environment and the interrelatedness of organisms and environmental |
| | processes |
| 4 | Identify major components of the ecosystem and their role in global sustainability |

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the instructor in class.

| TOPICS | TIMELINE |
|--|-----------|
| Course Introduction and Overview (Chapter 1) | 1/15 |
| Environmental Dilemmas We Face(Chapter 1) | 1/17 |
| Environmental Sustainability (Chapter 2) | 1/22 |
| Environmental Sustainability (Chapter 2) | 1/24 |
| Environmental History, Politics and Economics (Chapter 3) | |
| Environmental History, Politics and Economics (Chapter 3) | 1/29 |
| Risk Analysis(Chapter 4) | 1/31 |
| Human Population Change and the Environment (Chapter 7) | 2/5 |
| Human Population Change and the Environment (Chapter 7) | 2/7 |
| Movie: Crude Impact and Review | 2/12 |
| Exam 1 (Chapters 1-4, 7) | 2/14 |
| How Ecosystems Work (chapter 5) | 2/19 |
| Ecosystems and Evolution (Chapter 6) | 2/21 |
| **Thesis Sentence for Research Paper due by 11:59 pm on Blackboard** | |
| Ecosystems and Evolution (Chapter 6) | 2/26 |
| Air and Air Pollution (Chapters 8) | 2/28 |
| Freshwater Resources and Water Pollution (Chapters 10) | 3/5 |
| Freshwater Resources and Water Pollution (Chapters 10) | 3/7 |
| SPRING BREAK | 3/11-3/17 |
| The Oceans and Fisheries (Chapter 11) | 3/19 |
| Movie: An Inconvenient Truth and Review | 3/21 |
| Exam 2 (Chapters 5,6,8, 10,11) | 3/26 |
| Land Resource Overview (Chapters 12&13) | 3/28 |
| Agriculture and Food Resources (Chapter14) | 4/2 |
| Biological Resources (Chapter 15) | 4/4 |
| Biological Resources (Chapter 15) | 4/9 |
| Solid and Hazardous Waste: An unrecognized Resource (Chapter 16) | |
| Solid and Hazardous Waste: An unrecognized Resource (Chapter 16) | 4/11 |
| Movie: Assault on the Male | 4/16 |
| **Research Paper due by 11:59 pm on Blackboard** | |
| Nonrenewable Energy Resources (Chapter 17) | 4/18 |
| Nonrenewable Energy Resources (Chapter 17) | 4/23 |
| Renewable Energy Resources (Chapter 18) | |
| Renewable Energy Resources (Chapter 18) | 4/25 |
| Energy Resource Discussion | 4/29 |
| Review | 5/2 |
| Final Exam 3 (Chapters 12-18) | 5/7 |

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams –You will be given three in-class examinations. Each exam is worth 100 points. The exams will consist of a combination of multiple choice, true/false, fill in the blank and short answer questions. Attendance is required for all exams. Any student found cheating on an exam will receive a zero for the exam and may face other disciplinary action.

Presentation and Research Paper – You will give a presentation on an environmental issue that our society is currently facing. Your presentation, which will be made in class, should be approximately 10-15 minutes, include a description of the issue, the causes of the issue and potential resolutions. Paper/Presentation topics must be submitted and approved by the respective date. You will also submit 2-3 page research paper that addresses the biological, social, and economic arguments of the environmental issue that you chose to present.

Energy Resource Discussion – We will have a class discussion on an environmental science issue that will be decided by the instructor in advance. Students should come prepared to discuss the topic knowledgably and effectively. The essay question will be graded for correctness. The in-class discussion will be graded based on the following criteria and will be incorporated into the total grade as bonus points.

| Criteria | Point Range |
|---|----------------|
| Initiates contributions. Comments insightful and constructive. Uses facts to back up opinions. Listens attentively when others are talking and contributes to the dialogue. | 9-10 |
| Initiates contributions. Comments mostly insightful and constructive. Mostly uses facts to back up opinions. Occasionally comments are too general or not relevant to the discussion. Mostly attentive when others are talking as indicated by comments. | 7-8 |
| Comments are sometimes constructive, with occasional signs of insight. Comments not always relevant to the discussion. Student is inattentive when others are talking. Occasionally makes disruptive comments while others are speaking. | |
| Student does not initiate contribution and needs professor to solicit input. Comments are uninformative. Heavy reliance on opinion and personal taste, with no facts to back anything up. Does not listen to others. Talks while others are speaking or does not pay attention while others speak. Detractions from discussion or sleeps. | >5 |

Laboratory – While laboratory accounts for only 20% of your grade, you must receive a passing grade (60% or higher) in the laboratory to receive a passing grade in the class.

Grading Matrix:

| Instrument | Value |
|----------------|-------|
| Exam 1 | 100 |
| Exam 2 | 100 |
| Exam 3 | 100 |
| Presentation | 50 |
| Research Paper | 50 |
| Laboratory | 100 |
| Total: | 500 |

Grade Determination:

A = 90% or better

B = 80 - 89 %

C = 70 - 79 %

D = 60 - 69 %

F = less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Assignment Policy:

Assignments should be turned in on time. Late assignments will be graded, but with a penalty of 10% each day it is late.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-

<u>dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic Integrity.pdf</u> for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.