

University of North Texas at Dallas
Summer 3 week 1 SYLLABUS

BIOL1132-001 and 301 : Environmental Science 3Hrs			
Department of	Life & Health Sciences	School of	Liberal Arts & Sciences
Instructor Name:	Dr. Aubrey Frantz		
Office Location:	Room 251, Building 2		
Office Phone:	972-338-1523		
Email Address:	aubrey.frantz@untdallas.edu		
Office Hours:	Monday, Tuesday and Wednesday 2:00-3:00 pm (If you need another time, please contact me via email)		
Classroom Location:	DAL2 room 308		
Class Meeting Days & Times:	Lecture (001): MTWR 9:00-11:50am Laboratory(301): MTWR 12:00am – 1:50pm		
Course Catalog Description:	Interdisciplinary approach to understanding basic concepts in environmental science including critical scientific thought, biodiversity, resource management, pollution, global climate change, resource consumption and population growth. Emphasis on how these concepts affect and are affected by human society. Includes laboratory. May not be counted towards a major or minor in biology. <i>May be used to satisfy a portion of the Natural Sciences requirement of the University Core Curriculum.</i>		
Prerequisites:	None		
Co-requisites:	BIOL1132 Laboratory (section 301)		
Required Text:	Karr, S., J. Interlandi, and A. Houtman. 2015. Environmental Science for a Changing World. Second Edition. Macmillan Education. ISBN10: 1464162204; ISBN13: 9781464162206 LaunchPad Access is required		
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652;		
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 conservation biology. 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: At the end of this course, the student will			
1	Demonstrate the ability to assimilate and critically think about biological and scientific processes and theories		
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 discuss the interrelatedness of organisms, environmental processes, and human cultural and societal needs		
4	Be able to explain the conflicting biological, social, economic and needs of humanity and other living organisms		
5	Identify the major attributes and characteristics of the earth's major ecosystems and explain the role they play in critical ecosystem services		
6	List and discuss various individual and organizational actions that can mitigate or reverse the negative impact of human activities on the biosphere as well as the various tradeoffs related to 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	Assignment Due	Laboratory	Date
Course Introduction Environmental Literacy and Goals of Sustainability (Chapter 1)		Lab Introduction and Lab Safety Lab 1. Environmental Ethics and the Scientific Method Lab Assignment: <i>Discussion: Cancer Cure or Conservation</i>	5/16
Human Populations (Chapter 4)		Lab 10. Human Population and Environmental Impact Lab Handout: <i>Human Population and Ecological Footprint</i>	5/17
Ecosystems and Nutrient Cycling (Chapter 8)		Lab 2. The Carbon Cycle Lab Handout: <i>Measuring Photosynthesis</i>	5/18
Population Ecology (Chapter 9) and Community Ecology (Chapter 10) Evolution and Extinction (Chapters 11)	Learning Curves Chapters 1, 4, 8 due by 11:59 pm	Movie: <i>Cane Toads</i> Lab Assignment: Worksheet on the Movie: <i>Cane Toads</i>	5/19
Biodiversity (Chapters 12) Preserving Biodiversity (Chapter 13)	Learning Curves Chapters 11, 12, 13 due by 11:59 pm	Lab 3. The Flow of Energy through Ecosystems Lab Handout: <i>Food Web of a Barn Owl</i>	5/23
EXAM I		Movie 1: <i>Gasland</i> Lab Assignment: Worksheet on the Movie: <i>Gasland</i>	5/24
Air and Air Pollution (Chapter 20) Water and Water Pollution		Lab 6. Water and Water Pollution Lab Handout: <i>Water Quality Analysis</i>	5/25
Climate Change (Chapter 21) Movie: <i>An Inconvenient Truth</i>		Lab 11. Resource Consumption Lab Handout 6: <i>Marine Fisheries</i>	*5/26
**MEMORIAL DAY – No Class	Learning Curves 20, 21 due by 11:59 pm	**MEMORIAL DAY - No Lab	5/30
Fossil Fuels: Coal (Chapter 18) Fossil Fuels: Oil and Natural Gas (Chapter 19) Nuclear Power (Chapter 22)		Movie : <i>Crude Impact</i> Lab Assignment 4: Worksheet on the Movie: <i>Crude Impact</i>	5/31
Alternatives to Fossil Fuels – Renewable Energy (Chapter 23) Energy Discussion Question	Learning Curves Chapters 18, 19, 22, 23 due by 11:59 pm	Movie : <i>Kilowatt Ours</i> Lab Assignment 5: Worksheet on the Movie: <i>Kilowatt Ours</i>	6/1
EXAM II		No Lab	6/2

*Last day to withdraw – May 26th

**Holiday (no class) – May 30th

Course Evaluation Methods

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

Grade determination: Separate letter grades will not be assigned for the lab. While laboratory accounts for only 25% of your grade, you must receive a passing grade (60% or higher) in the laboratory to receive a passing grade in the class.

Exams –You will be given 2 in-class examinations. Each exam is worth 100 points. The exams will consist of a combination of multiple choice questions and short answer/essay questions. **Attendance is required for all exams.** No make-up exams for unexcused absences. Any student found cheating on an exam will receive a zero for the exam and may face other disciplinary action. **Note: 882-E scantrons and pencils are required for every exam.**

LaunchPad LearningCurves – On the **LaunchPad platform** each chapter of your book has a series of questions (quiz) that will test your reading comprehension. There is no grade for this assignment, simply by completing the questionnaire you will get the corresponding 10 points per chapter. By completing 10 assigned Learning Curves on time, you will receive 100 points. Late submissions will not be graded.

To register for LaunchPad component of the course go to:

<http://www.macmillanhighered.com/launchpad/saes2e/3515052> PLEASE bookmark the page to make it easy to return to. If you have problems registering, purchasing, or logging in, please contact Customer Support. You can reach a representative 24 hours a day, 7 days a week online at <http://support.bfwpub.com/supportform/form.php?View=contact> or by phone at (800) 936-6899

Laboratory- You will perform experiments designed to give you hands-on real-world applications of the lecture material. In some cases, you will watch documentaries to complement the experiments. After each laboratory exercise, you will have an associated lab report or lab assignment worth 10 points. Each assignment is due at the beginning of the next lab session. Attendance in laboratory is mandatory. **Late assignments will be graded, but with a penalty of 10% each day it is late.**

Energy Resource Discussion – We will have a class discussion on an environmental science issue that will be communicated by the instructor in advance. Students should come prepared to discuss the topic knowledgably and effectively. Student participation in the discussion will be graded and will be incorporated into the total grade as bonus points.

Grading Matrix:

Instrument	Value (points)
Exam 1	100
Exam 2	100
LaunchPad Learning Curves (10 x 10pts)	100
Laboratory	100
Total:	400

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.

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 Learning Curve submissions will not be graded. Late thesis statements, annotated bibliographies, and research papers will be graded, but with a penalty of 10% each day it is late. Assignment policies for laboratory can be found on the lab syllabus. **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-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.

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.

UNT Dallas Learning Commons

Writing Center

The UNT Dallas Writing Center offers free, one-on-one or group tutoring services to all registered undergraduate and graduate students. The Writing Center is located on the **3rd floor of DAL 1** (big glass structure in front of the stairs). We are available for appointments during the following hours: **Mon-Thurs: 9:00am-7:00pm; Fri: 3:00pm-7:00pm; Sat: 10am-3:00pm.** To make an appointment, browse the Writing Center's online resources, or see a list of our student FAQ's, please visit www.untdallas.edu/wc.

Math Lab

The UNT Dallas Math Lab offers free, one-on-one or group tutoring services to all registered undergraduate students. Our goal is to help students improve their math skills, succeed in all of courses requiring math, and learn math-related skills they will need post-graduation. We work with students enrolled in all MATH courses at UNT Dallas and provide limited assistance with STATS and ACCT courses. The Math Lab is located on the **3rd floor of DAL 1 in room 336**. Students can walk-in at any time. Check the spring hours at: <http://www.untdallas.edu/ml>. If students cannot come in for face-to-face tutoring, students can take advantage of our free online tutoring service through SMARTHINKING. To get more information about this service, visit www.untdallas.edu/smart.