## University of North Texas at Dallas Spring 2013 SYLLABUS

# Course Abbreviation/Number/Title/Semester Hrs BIOL1132D : Environmental Science Laboratory 0Hrs

BIOL1132D : Environmental Science Laboratory 0Hrs								
Den	artment of	Life a	nd Health Sciences	Division of	Liberal Arts and Life Sciences			
200		1 = 0 0		2				
Instructor Name: Dr. A		Dr. Au	ıbrey Frantz					
Office Location: Room			251, Building 2					
			38-1523					
			y.frantz@unt.edu					
Office Hours:	T 2:00-4:0							
	R 2:00-4:00,							
(If you need another time, please contact me by email)  Classroom Location: Founders Hall 255								
Class Meeting			7 Tall 200	S 12:00-1:5	50			
Course Catalog			olinary approach to u		concepts in environmental			
Description:		ience including critical scientific thought, biodiversity, resource management,						
					-			
l -		llution, global climate change, resource consumption and population growth. nphasis on how these concepts affect and are affected by human society.						
			udes laboratory. May not be counted towards a major or minor in biology.  7 be used to satisfy a portion of the Natural Sciences requirement of the					
				on of the Natural Scie	sinces requirement of the			
Dravaguiaitaa		nversity	Core Curriculum.					
Prerequisites: Co-requisites:	None BIOL113	2D Lab	oratory					
Co-requisites.	BIOLITS	ZD Lab	oratory					
Required Text:		_	vironmental Science.	LR Berg and MC H	ager. 2009. John Wiley and			
	Sons, In	c. NJ.						
	7 1 3 6	1.5		T 1 ( 15)	1 1 A			
				e Laboratory and Fie	ld Activities. MK King et al.			
2006. Kendall/Hunt Publishing Co.								
Access to Learning Resources:		UNT Dallas Library:	700 0005.					
		phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm						
		UNT Dallas Bookstore:						
		phone: (972) 780-3652;						
				ngr@fheg.follett.com				
Course Goals or Overview:								
					ce 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 diagonalize of current environmental and concernation challenges. Students will be willing and							
	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.							
7 2 3.0.								
Learning Objectives/Outcomes: At the end of this course, the student will								
	Be able to explain the conflicting biological, social, economic and needs of humanity and other living organisms							
2 Demons	Demonstrate the ability to assimilate and critically think about environmental issues, environmental policy							
	and legislation  Define the role of organisms in their environment and the interrelatedness of organisms and environmental							
process	processes							
4 Identify	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.

**Laboratory Schedule** 

Week	Date	Topic	Points
1	Jan 19	Lab Safety	
		Lab 1. Environmental Ethics and the Scientific Method	
		Lab Assignment 1: Worksheet on Cancer Cure or Conservation	5
2	Jan 26	Movie: Gasland	
		Lab Assignment 2: Worksheet on the Movie Gasland	5
3	Feb 2	NO LAB	
4	Feb 9	Research Literacy Instruction (Library Instruction)	5
5	Feb 16	Lab 10. Human Population and Environmental Impact	
		Lab Report 1: Human Population and Ecological Footprint	10
6	Feb 23	Lab 2. The Carbon Cycle	10
		Lab Report 2: Photosynthesis	
7	Mar 2	Lab 3. The Flow of Energy through Ecosystems	
		Lab Report 3: Flow of Energy through Food Webs	10
8	Mar 9	Lab 5. Preserving Local Ecosystems – Movie: Cane Toads	
		Lab Assignment 3: Worksheet on the Movie: Cane Toads	5
9	Mar 16	SPRING VACATION – NO LAB –	N/A
10	Mar 23	Lab 6. Water and Water Pollution	
		Lab Report 4: Water Quality Analysis	10
11	Mar 30	Lab 11. Resource Consumption	
		Lab Report 5: Marine Fisheries	10
12	Apr 6	Videos: Plastic bags and bottled water	
		Lab Assignment 4: Essay on plastic bags and bottled water	5
13	Apr 13	Lab 4. Land Use and Resource Management	
		Lab Report 6: Soil Analysis	10
14	Apr 20	Movie: Kilowatt Ours	
		Lab Assignment 5: Worksheet on the Movie: Kilowatt Ours	5
15	April 27	STUDENT PRESENTATIONS –	5
16	May 4	STUDENT PRESENTATIONS –	5

#### **Course Evaluation Methods**

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

**Weekly Assignments -** During each experiment, you will record observations in the "Report Sheets" provided in your lab manual. These "report sheets" also have calculations to perform and additional questions about the topic. Once an experiment is completed, reports will be due at the beginning of the following lab. Weekly assignments also include handouts for the movies seen in lab.

**Presentation and Research Paper** – As described in the BIOL1132D lecture syllabus, you will give a presentation and write a short paper on an environmental issue that our society is currently facing. Your presentation should be in a powerpoint format, approximately 10-15 minutes, and include a description of the issue, the causes of the issue and potential resolutions. You will also submit 2-3 page paper that addresses the biological, social, and economic arguments of the environmental issue that you chose to present.

Grade determination: Separate letter grades will not be assigned for the lab. As stated in the syllabus for BIOL 1132D, the lab is worth 20% of your total course grade. This is a large component of your course grade and should be an opportunity to improve your grade, rather than harm it.

#### **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 for complete provisions of this code.</u>

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 <u>www.unt.edu/dallas</u>. 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.