

**University of North Texas at Dallas**  
**Fall 2016**  
**SYLLABUS**

<b>BIOL1132D-301 : Environmental Science 3Hrs</b>			
<b>Department of</b>	<b>Life &amp; Health Sciences</b>	<b>School of</b>	<b>Liberal Arts &amp; Sciences</b>
<b>Instructor Name:</b>	<b>Rheketah Berwick, M.S.</b>		
<b>Office Location:</b>	<b>302A Dal2</b>		
<b>Office Phone:</b>	<b>Email Preferred</b>		
<b>Email Address:</b>	rheketah.berwick <a href="mailto:rheketah.berwick@untdallas.edu">@untdallas.edu</a>		
<b>Office Hours:</b>	<b>Thursday 8:50pm-9:30pm; Friday 2:50pm-3:30pm.</b>		
<b>Course Format/Structure:</b>	Face-to-Face		
<b>Classroom Location:</b>	<b>Dal 255</b>		
<b>Class Meeting Days &amp; Times:</b>	<b>Friday 10:00am-11:50am</b>		
<b>Course Catalog Description:</b>	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>		
<b>Prerequisites:</b>	<b>None</b>		
<b>Co-requisites:</b>	<b>BIOL1132D Lecture</b>		
<b>Required Text:</b>	<b>None</b>		
<b>Recommended Text and References:</b>	<b>None</b>		
<b>Access to Learning Resources:</b>	UNT Dallas Library: (Founders Hall) phone: (972) 780-1616 web: <a href="http://www.untdallas.edu/library">http://www.untdallas.edu/library</a> e-mail: <a href="mailto:Library@untdallas.edu">Library@untdallas.edu</a> UNT Dallas Bookstore: (Building 1) phone: (972) 780-3652 web: <a href="http://www.untdallas.edu/bookstore">http://www.untdallas.edu/bookstore</a> e-mail: <a href="mailto:untdallas@bkstr.com">untdallas@bkstr.com</a>		
<b>Course Goals or Overview:</b>	The goals of this course are as follows -		
	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.		
<b>Learning Objectives/Outcomes:</b>	(Align with professional standards and/or core curriculum objectives) At the end of this course, students will be able to:		
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

(Outline the major topics covered in the course with approximate timelines. Also include the schedule of tests and other graded events)

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in class or via class email or Blackboard announcement. Additional readings and activities may be added, these will be noted in the Readings and Activities/Assignments sections.

## Laboratory Schedule

Spring 2016

Week	Date	Topic	SLO	Points
1	Aug 26	- NO LAB -		-
2	Sept 2	Lab Introduction and Lab Safety Lab 1. Environmental Ethics and the Scientific Method <b>Lab Assignment 1: Discussion: Cancer Cure or Conservation</b>	3, 4	10
3	Sept 9	Movie 1: <i>Gasland</i> <b>Lab Assignment 2: Worksheet on the Movie: Gasland</b>	6	10
4	Sept 16	Lab 10. Human Population and Environmental Impact <b>Lab Handout 1: Human Population and Ecological Footprint</b>	2, 3, 4, 6	20
5	Sept 23	Lab 2. The Carbon Cycle <b>Lab Handout 2: Measuring Photosynthesis</b>	3, 4	20
6	Sept 30	Lab 11. Resource Consumption <b>Lab Handout 3: Marine Fisheries</b> <b>LAB EXAM 1 – TAKE HOME</b>	2, 3, 4, 6	20
7	Oct 7	Movie 2: <i>Cane Toads</i> <b>Lab Assignment 3: Worksheet on the Movie: Cane Toads</b> <b>LAB EXAM 1 – DUE AT THE BEGINNING OF THE LAB</b>	2	10 50
8	Oct 14	Lab 3. The Flow of Energy through Ecosystems <b>Lab Handout 4: Food Web of a Barn Owl</b>	3, 4	20
9	Oct 21	Lab 6. Water and Water Pollution <b>Lab Handout 5: Water Quality Analysis</b>	2, 4	20
10	Oct 28	Lab 4. Land Use and Resource Management <b>Lab Handout 6: Soil Analysis</b>	5	20
11	Nov 4	Movie 3: <i>Crude Impact</i> <b>Lab Assignment 4: Worksheet on the Movie: Crude</b>	3, 4	10

		<i>Impact</i>		
12	Nov 11	<b>* STUDENT PRESENTATIONS</b>	1, 2, 3, 4, 5, 6	<b>40</b>
13	Nov 18	<b>* STUDENT PRESENTATIONS</b>	1, 2, 3, 4, 5, 6	-
14	Nov 25	Thanksgiving Break		
15	Dec 2	- NO LAB – Pre-finals Week		-
16	Dec 9	- NO LAB – Finals Week		
		<b>TOTAL:</b>		<b>250</b>

## Course Evaluation Methods

**Grade determination: Separate letter grades will not be assigned for the lab. While laboratory accounts for only 30% of your grade, you must receive a passing grade (60% or higher) in the laboratory to receive a passing grade in the class.**

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

**Lab Assignments (50 points)** – We will have a discussion in class and you will write a short essay about it. In addition, you will watch documentaries to complement class content. Each student should turn his/her assignment individually. Each assignment will be worth 10 points and it will be **due at the end of the corresponding lab session.**

**Lab Reports (120 points)** – You will perform experiments designed to give you hands-on real-world applications of the lecture material. After each laboratory exercise, you will write a lab report worth 20 points. Although you will work in groups to perform the experiments, each student should turn in his/her lab report individually. Specific instructions will be provided in class for each lab report, however all of them will be required to contain the following sections: Introduction, Materials and Methods, Results, Discussion and Conclusion, and Bibliography. **The lab reports will be due at the beginning of the next lab session.**

**Lab Exam (50 points)** – You will have one lab exam worth 50 points. This will be a **take home exam.**

**Student Presentation (40 points)** – This is an **oral presentation** by each student based on the topic that he/she selected and developed for his/her Research Paper.

### Grading Matrix:

Instrument	Value (Points)	Total
Lab Assignments	4 at 10 points each	40
Lab Reports	6 at 20 points each	120
Lab Exam	1 at 50 points	50
Student Presentation	1 at 40 points	40
<b>Total:</b>		<b>250</b>

### Grade Determination:

Revised April 2016 supersedes all previous versions

A = 250-226 pts 90% or better  
B = 225-199 pts 80 – 89 %  
C = 200-174 pts 70 – 79 %  
D = 175-150 pts 60 – 69 %  
F = 149 less than 60%

## **University Policies and Procedures**

**Students with Disabilities (ADA Compliance):** The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Disability Services Office website at <http://www.untdallas.edu/disability>. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu or at Founders Hall, room 204. (UNTD Policy 7.004)

**CourseEval Policy:** Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. 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 students' evaluations to be an important part of your participation in this class.

**Assignment Policy:** Assignments are intended to reinforce material covered in lecture, and help prepare you for the exams. Collaborative efforts on completing the assignments are encouraged so long as all member of the collaboration contribute equally. As with all other graded assessments, cheating will not be tolerated. While collaborations are encouraged, **each student must submit their own work**, which cannot be identical to the work submitted by the other members of the collaboration. 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 (Policy 7.002) at [http://www.untdallas.edu/sites/default/files/page\\_level2/pdf/policy/7.002%20Code%20of%20Academic\\_Integrity.pdf](http://www.untdallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf) Refer to the Student Code of Student Rights, Responsibilities and Conduct at [http://www.untdallas.edu/sites/default/files/page\\_level2/hds0041/pdf/7\\_001\\_student\\_code\\_of\\_conduct\\_may\\_2014.pdf](http://www.untdallas.edu/sites/default/files/page_level2/hds0041/pdf/7_001_student_code_of_conduct_may_2014.pdf) Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. In addition, all academic work turned in for this class, including exams, papers and written assignments must 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:** Campus facilities will close and operations will be suspended when adverse weather and/or safety hazards exist on the UNTD campus or if travel to the campus is deemed dangerous as the result of ice, sleet or snow. In the event of a campus closure, the Marketing and Communication Department will report closure information to all appropriate major media by 7 a.m. That department will also update the UNTD website, Facebook and Twitter with closing information as soon as it is possible. For more information please refer to <http://www.untdallas.edu/police/resources/notifications>

**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.*

The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at <http://www.untDallas.edu/hr/upol>

**Diversity/Tolerance Policy:** Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive and 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 Dean of Students as the instructor deems appropriate. (UNTD Policy 7.001)