University of North Texas at Dallas SPRING 2016 SYLLABUS **BIOL1132 Sec. 304 : Environmental Science 3Hrs Department of Life & Health Sciences** School of Liberal Arts & Sciences **Instructor Name:** Rheketah Berwick M.S. **Office Location:** Room 305, Building 2 **Email Preferred Office Phone: Email Address:** rheketah.berwick @untdallas.edu Office Hours: Wednesday 1:20-2:20pm **DAL2 Lab 255 Classroom Location: Class Meeting Days & Times:** Lecture: Monday & Wednesday 10:00am-11:20pm Laboratory: Wednesday11:30am -1:20pm section 304 **Course Catalog** Interdisciplinary approach to understanding basic concepts in environmental science including **Description:** 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. May be used to satisfy a portion of the Natural Sciences requirement of the University Core Curriculum. **Prerequisites:** None **Co-requisites: BIOL1132D Lecture Required Text:** None **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 Demonstrate the ability to assimilate and critically think about biological and scientific processes and theories 1 Demonstrate the ability to assimilate and critically think about environmental issues, environmental policy and 2 legislation 3 Define the role of organisms in their environment and discuss the interrelatedness of organisms, environmental processes, and human cultural and societal needs Be able to explain the conflicting biological, social, economic and needs of humanity and other living 4 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.

Laboratory Schedule

Week	Date	Торіс	Points
1	Jan 20	- NO LAB -	-
2	Jan 27	Lab Introduction and Lab SafetyLab 1. Environmental Ethics and the Scientific MethodLab Assignment 1: Discussion: Cancer Cure or Conservation	10
3	Feb 3	Movie 1: Gasland Lab Assignment 2: Worksheet on the Movie: Gasland	10
4	Feb 10	Lab 10. Human Population and Environmental Impact Lab Handout 1: Human Population and Ecological Footprint	20
5	Feb 17	Lab 2. The Carbon Cycle Lab Handout 2: Measuring Photosynthesis	20
6	Feb 24	Lab 11. Resource Consumption Lab Handout 3: Marine Fisheries LAB EXAM 1 – TAKE HOME	20
7	Mar 2	Movie 2: <i>Cane Toads</i> Lab Assignment 3: Worksheet on the Movie: <i>Cane Toads</i> LAB EXAM 1 – DUE AT THE BEGINNING OF THE LAB	10 40
8	Mar 9	Lab 3. The Flow of Energy through Ecosystems Lab Handout 4: Food Web of a Barn Owl	20
9	Mar 14-20	SPRING BREAK!	-
10	Mar 23	Lab 6. Water and Water Pollution Lab Handout 5: Water Quality Analysis	20
11	Mar 30	Lab 4. Land Use and Resource Management Lab Handout 6: Soil Analysis	20
12	Apr 6	Movie 3: <i>Crude Impact</i> Lab Assignment 4: Worksheet on the Movie: <i>Crude Impact</i>	10
13	Apr 13	Movie 4: <i>Kilowatt Ours</i> Lab Assignment 5: Worksheet on the Movie: <i>Kilowatt Ours</i>	10
14	Apr 20	* STUDENT PRESENTATIONS	-
15	Apr 27	* STUDENT PRESENTATIONS	40
16	May 2-7	- NO LAB – Pre-finals Week	-
17	May 9-13	- <i>NO LAB</i> – Finals Week TOTAL:	250

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 30% of your grade, <u>you must receive a passing grade (60% or higher) in the laboratory to receive a passing grade in the class.</u>

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 (40 points) - You will have one lab exam worth 40 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	5 at 10 points each	50
Lab Reports	6 at 20 points each	120
Lab Exam	1 at 40 points	40
Student Presentation	1 at 40 points	40
Total:		250

Grade Determination:

A = 90% or betterB = 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 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 Building 2, room 204.

Blackboard Learn Accessibility Statement

University of North Texas at Dallas is committed to ensuring its online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. Blackboard Learn course management system's accessibility statement is also provided: http://www.blackboard.com/Platforms/Learn/Resources/Accessibility.aspx

Student Evaluation of Teaching Effectiveness 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.

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.untdallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.

Bad Weather

This policy applies to laboratory sessions and only if the campus is closed. 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 Campus 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.

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**.

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.

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 **3***rd* **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**