University of North Texas at Dallas

SPRING 2025 SYLLABUS

BIOL 1132.0301: Environmental Science Laboratory

Department of	Natural Sciences
Instructor Name	Dr. Anshu Singh
Office Location	Founders Hall 302
Office Phone	NA
Email Address	anshu.singh@unt.edu or via Canvas messages
Office Hours	Mondays 4-6 PM & Thursday, PM, or by appointment
Course Format/Structure	Face to Face
Classroom Location	**FH 256**
Class Meeting Days & Times	Thursday 11:30AM - 1:20PM
Course Catalog Description	BIOL 1132.H302 is the laboratory section of the environmental science course, BIOL 1132. This course is an 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 is on how these concepts affect and are affected by human society. May not be counted towards a major in biology.
Prerequisites	none
Corequisites	Credit for concurrent enrollment in BIOL 1132
Required Reading	***Laboratory Manual for Introduction to Environmental Science*** ***ISBN: 9798385102419*** ***Author: Rodriguez*** ***Publisher: Kendall Hunt Publishing Company*** ***Formats: PAPERBACK***
Access to Learning Resources	**UNT Dallas Library:** Phone: (972) 338-1616; Website URL: http://www.untdallas.edu/library **UNT Dallas Bookstore:** Phone: (972) 780-3652; Website URL: http://www.untdallas.edu/bookstore Email: untdallas@bkstr.com

Canvas Resources **Supported Browsers:** • Chrome **Supported Devices:** • iPhone • Android • Chromebook *Note: Tablet users can use the Canvas app* **Screen Readers:** • VoiceOver (Safari) • JAWS (Internet Explorer) • NVDA (Firefox) *Note: There is no screen reader support for Canvas in Chrome*	**Getting Help with Canvas:** **Canvas 24/7 Phone Support for Students: 1-833-668-8634** **Canvas Help Resources:** **Canvas Student Guide - https://community.canvaslms.com/docs/DOC-10701** For additional assistance, contact UNT Dallas Distance Learning: DAL1, Room 157 Email: distancelearning@untdallas.edu **If you are working with Canvas 24/7 Support to resolve a technical issue, please keep me updated on the troubleshooting progress.** **If you have a course-related issue (e.g., course content, assignment trouble, quiz difficulties), please contact me during office hours or by email.**

Course Overview

Course Goals/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, many of which do not have a clear-cut solution. Students should be willing and able to voice and defend their opinions on these subjects as well as be respectful of the opinions of others. Students will be evaluated based on, laboratory assignments, exam performance, and group presentation.

Learning Objectives/Outcomes:

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/theories.
2. Demonstrate the ability to assimilate and critically think about environmental policy and legislation.
3. Explain the various roles of organisms in their environment, and discuss the interrelatedness of living organisms, environmental processes, and human cultural and societal needs.
4. Be able to accurately explain the conflicting social, economic, and biological 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 economically important ecosystem services and bio tourism.
6. List and discuss various personal and corporate actions that can mitigate or reverse the negative impact of human activities on the biosphere; explain various tradeoffs related to sustainable stewardship of the earth's biodiversity and its resources.
7. Broaden and refine their thinking as a part of the give-and-take of ideas, seeking to better understand other's perspectives as well as their own

Course Outline and Discussion Topics

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in lab or on Canvas.

Week of	Topic	Points
1/13/2025	**Classes Begin – NO LABS this week**	
1/23/2025	Introduction, Lab Safety Lab 1: The Scientific Method **Lab Assignment 1**	10
1/30/2025	Lab 2: An Introduction to Environmental Science and Basic Laboratory Skills **Lab Assignment 2**	10
2/6/2025	Lab 3: Conservation History: Rachel Carson's Silent Spring **Lab Assignment 3**	10
2/13/25	Lab 4: Human Population Growth and Survivorship **Lab Assignment 4**	
2/20/2025	Lab 5: Energy Conservation, Air Pollution, and Kilowatt Ours **Lab Assignment 5**	10
2/27/2025	**Lab Exam 1 (online)**	50
3/6/2025	Lab 6: Energy Resources **Lab Assignment 6**	10
March 10-14	**SPRING BREAK**	
3/20/2025	Lab 7: Biodiversity and the Biodiversity Crisis **Lab Assignment 7**	10
Week of	**Topic**	**Points**
3/27/2025	Lab 8. Soil Analysis Part I: pH, Nutrients, Conductivity **Lab Assignment 8**	10
4/3/2025	Lab 9: Water Quality and Dissolved Oxygen **Lab Assignment 9**	10

4/10/2025	Lab 10: Solid Waste **Lab Assignment 10**	10
4/17/2025	**Lab Exam 2 (online)**	50
4/24/2025	**Student Presentations, Virtual (online)**	50
5/1/2025	Reading Day May 2nd, NO LABS	
May 5-10/	**Finals Week - NO LABS**	

Course Evaluation Methods

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

Student Presentations (50 points) – You will work in a group of three to four students to prepare and deliver one **15 minutes** presentation on an environmental case or issue of your choice. Specific instructions will be provided in class. The group presentation is worth 20% of your grade.

Lab Assignments and Reports (100 points): You will complete a lab assignment or report on a weekly basis. Each lab assignment or report will be assigned at the end of the associated lab period and it will be due at the beginning of the next lab period. You must have completed the lab activity in its entirety to be eligible to submit the associated lab assignment or report for grading. Specific instructions will be provided in class. Lab assignments and reports are worth 40% of your grade.

Laboratory Exams (100 points) – You will complete TWO online lab exams. The lab exams are worth 40% of your grade.

*****Note: The lab is worth 25% of your final overall grade for the course. However, you must receive a passing grade (60% or higher) in the laboratory on its own to receive a passing grade in the class. Students must pass both the lecture and the lab independently to pass the course. If you do not pass the laboratory portion you will not pass the class and you automatically fail the entire course, and if you fail the lecture, you automatically fail the course as well.***

Grading Matrix

Instrument	**Value (points or percentages)**	**Total**
Student Presentation	1 group presentation at 50 pts.	50
Lab Assignments and Reports	10 assignments at 10 pts. each	100
Midterm Exam	50	50
Final Exam	50	50
Total		**250**

Grade Determination:
A = 89.5% or better
B= 79.5%-89.4%
C = 69.5%-79.4%
D =59.5%-69.4%
F = 59.4% and below

Need tutoring services or just some help with a particular assignment? For tutoring that empowers students to achieve success, schedule an appointment with the Learning Commons today at https://www.untdallas.edu/learning/schedule-appointment/.

Course-Specific Policies

Attendance and Participation Policy:
The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol.. ***Please be courteous to the professor and your fellow students. Your attention in class is expected and needed to understand the material. Please no texting, web surfing, or talking in class while the professor is speaking (unless you are addressing the professor specifically).***

Assignment Policy:
Assignments should be completed as scheduled. No makeup assignments will be allowed except for documented emergencies (See Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol)

Late Work Policy:
Late work will not be accepted. Assignments and exams will not be available after the deadline. If you have an extenuating circumstance, please contact me via email before the assignment or exam is due to make alternative arrangements.

Exam Policy:
Exams should be taken as scheduled. **No makeup examinations will be allowed except for documented emergencies** (See Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol).

Contacting the Professor:
You may contact me via OUTLOOK email, also Canvas messages but the response will be late as I can't access Canvas everywhere. My preferred method is EMAIL through Outlook. I try to return messages as soon as possible, but I may not be immediately available. Therefore, please allow up to 24-48 hours for a response.

University Policies and Procedures

Students with Disabilities (ADA Compliance):
The University of North Texas at Dallas makes reasonable academic accommodations for students with disabilities. Students seeking accommodation must first register with the Disabilities 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 accommodation at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delays in implementation. Note that a student 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 on the first floor of the Student Center.
Canvas Instructure Accessibility Statement: *optional if you do not use Canvas for the course*
University of North Texas at Dallas is committed to ensuring that 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. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. The Canvas Instructure Accessibility Statement is provided at https://www.canvaslms.com/accessibility.

NOTE: Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

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 UNT Dallas Academic Integrity Policy in the appropriate Catalog at http://dallascatalog.unt.edu.
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.
Web-based Plagiarism Detection*:* Please be aware in some courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

Classroom etiquette:
Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student's Rights, Responsibilities, and Conduct will be referred to the Dean of Students as the instructor deems appropriate (UNTD Policy 7.001 found at https://untsystem.policytech.com/dotNet/documents/?docid=1278&public=true).

Classroom Disruption:
Students are expected to always engage with the instructor and other students in this class in a respectful and civil manner to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be directed to leave the classroom. A student who is directed to leave class due to disruptive behavior is not permitted to return to class until the student meets with a representative from the Dean of Students Office. It is the student's responsibility to meet with the Dean of Students before class meets again and to provide the instructor confirmation of the meeting. A student who is directed to leave class will be assigned an unexcused absence for that

class period and any other classes the student misses because of not meeting with the Dean of Students. The student is responsible for the material missed during all absences, and the instructor is not responsible for providing missed material. In addition, the student will be assigned a failing grade for assignments, quizzes or examinations missed and will not be allowed to make up the work.
The Code of Student's Rights, Responsibilities, and Conduct (UNTD Policy 7.001 found at https://untsystem.policytech.com/dotNet/documents/?docid=1278&public=true) describes disruption as the obstructing or interfering with university functions or activity, including any behavior that interferes with students, faculty, or staff access to an appropriate educational environment. Examples of disruptive behavior that may result in a student being directed to leave the classroom include but are not limited to: failure to comply with reasonable directive of University officials, action or combination of actions that unreasonably interfere with, hinder, obstruct, or prevents the right of others to freely participate, threatening, assaulting, or causing harm to oneself or to another, uttering any words or performing any acts that cause physical injury, or threaten any individual, or interfere with any individual's rightful actions, and harassment. You are encouraged to read the Code of Student's Rights, Responsibilities, and Conduct for more information related to behaviors that could be considered disruptive.

Course Evaluations:
Student evaluations of teaching effectiveness are a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester via your campus email, providing you a chance to comment on how this class is taught. I (as the instructor) will not have access to the results of the evaluations until after final grades have been posted. 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.

Sexual Harassment, Sexual Misconduct, Intimate Partner Violence and Stalking
UNT Dallas is committed to creating a safe learning environment for all members of our community, free from gender and sex-based discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking, in accordance with Title IX, Texas laws and University Policies. Please note that all employees are mandated reporters and must report all instances of sexual misconduct, dating violence, sexual assault, domestic violence and stalking to the Title IX Coordinator. If you or someone you know has experienced any form of sex or gender-based discrimination or violence and wish to speak to the Title IX Coordinator, you can email them at titleix@untdallas.edu or file a report here.

Pregnancy, Pregnancy Related Conditions and Parenting Modifications Under Title IX
UNT Dallas is committed to compliance with Title IX, and to supporting the academic success of pregnant and parenting students and students with pregnancy related conditions. If you are a pregnant, have pregnant related conditions or a parenting student (child under one-year needs documented medical care) who wishes to request reasonable related modifications from the University under Title IX, please email the Title IX Coordinator at titleix@untdallas.edu The Title IX Coordinator will work with your professors and academic unit to provide reasonable modifications needed to be supportive of your education while pregnant or as a parent under Title IX.

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.

Inclement Weather and Online Classes:
Online classes may or may not be affected by campus closures due to inclement weather. Unless otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

Technology Assistance:
To successfully access the materials in Canvas, UNT Dallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you have trouble accessing or using components of the course, try using Google Chrome browser. If you still experience technical difficulties, first, notify your instructor.

If the problem is still not resolved, call Distance Learning at the phone number listed on the first page of the syllabus. Also, no matter what browser you use, always enable pop-ups.

For more information see:

- UNT Dallas Canvas Technical Requirements: https://community.canvaslms.com/docs/DOC-10721
- Canvas Instructure Support & Unsupported Operating Systems: https://community.canvaslms.com/docs/DOC-10720

AI Policy:
UNT Dallas acknowledges the evolving capabilities of Artificial Intelligence (AI) technologies and their various effects on student writing and content creation. The Department of Natural Sciences takes a use-with-permission approach to AI. Students are only permitted to use AI technology in the creation of any course content if permitted by the course instructor. If the use of AI technology is detected, without specific instructor permission, the student will be deemed in violation of the plagiarism policy.