ENVR 1401 Environmental Science
Course Syllabus: Spring 2025

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

Instructor: Chris McAllister, Ph.D.
Office: UHS 163
Phone: (903) 434-8286
Email: cmcallister@ntcc.edu
Class meets: T-Th 9:30-10:50am (MS room 132)
Lab meets: Tues 1:30-4:20pm (MS room 128)

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday and Weekends
	9:00-11:00 am	8:30-9:30am	9:00-11:00am	8:30-9:30am 1:30-3:30pm	**NONE, *email me.**

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified

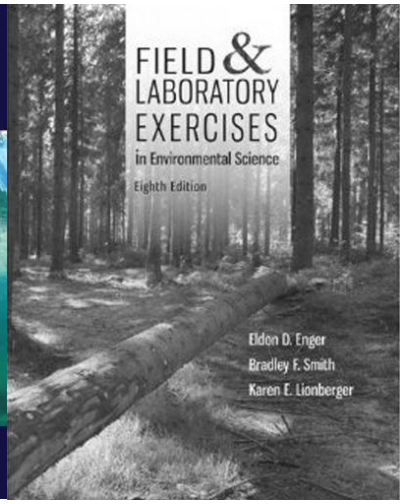
Course Description: 4 Semester Credit Hours. A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Lab activities will cover methods used to collect and analyze environmental data.

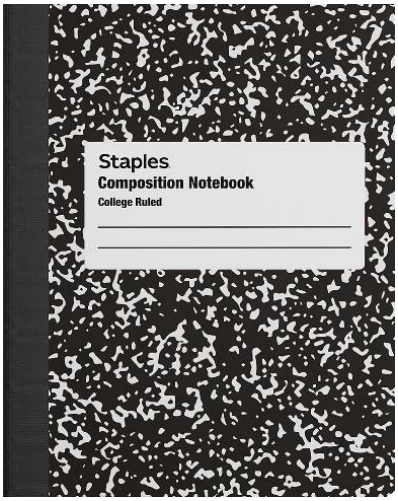
Prerequisite(s): None

Required Instructional Materials:
Textbook: **Environmental Science: A Global Concern, 2024**
Edition: 16th
Author: William Cunningham, Mary Cunningham, Catherine O'Reilly & Katherine Winsett
Publisher: McGraw Hill **ISBN Number: 978-1-264-64784-2**

Lab Manual: **Field and Laboratory Activities for Environmental Science, 2013**
Edition: 13th|
Author: Eldon Enger and Bradley Smith
Publisher: McGraw-Hill **ISBN13: 9780077599829**

Required Lab Notebook (Journal): (a *bound* composition notebook (minimum of 50 sheets with 5 x 5 quads).





Minimum Technology Requirements: Internet Access; Microsoft Office or Google Suite

Required Computer Literacy Skills: Blackboard Ultra; Microsoft Office or Google Suite

Optional Instructional Materials: none

Homework and quizzes: are assigned using McGraw-Hill Connect.

Required Computer Literacy Skills: To succeed, you will need basic computer skills that include how to use email, attach a document to an email message, navigate web pages, download files, and upload files. You will need to use the Internet to research information. Additionally, you will need a computer with regular access to a reliable Internet connection, a current web browser (such as Chrome [preferably] or Firefox), a technology "back-up" plan in case your primary computer is unavailable.

COURSE Student Learning Outcomes: Upon successful completion of this course, students will:

1. Recognize, describe, and quantitatively evaluate earth systems, including the land, water, sea, and atmosphere, and how these function as interconnected ecological systems.
2. Assess environmental challenges facing humans caused by their interaction with the physical and biological environment (e.g., population growth, energy resources, food production, pollution, water and resource use).
3. Acquire a scientific vocabulary and critical thinking skills related to environmental science.
4. Assess the effectiveness and feasibility of environmental policy and its impact.
5. Apply the scientific method to environmental investigation.
6. Measure and observe aspects of the environment (e.g., air, water, soil) through sampling and sample analysis.
7. Develop an assessment plan for an environmental case study.
8. Demonstrate the collection, analysis, and reporting of data.

Evaluation/Grading Policy:

Lecture Average 60% of final course grade:

The "lecture" component of this course will consist of online homework/quizzes through McGraw-Hill Connect and examinations with the following weight in calculating your final average:

30% Unit Exam Assessments 1-4

10% Final Lecture Exam

*10% Connect work

10% weekly lecture quizzes

Lab Average 40% of final course grade:

The lab component of this course will consist of two lab practicals and laboratory journal and and hands-on activities performed in the laboratory.

25% Lab Practicals (Midterm and Final)

10% Laboratory Journal

5% Optional report

Final Grades will be determined as follows:

90.0 --- 100 = A
80.0 --- 89.9 = B
70.0 --- 79.9 = C
60.0 --- 69.9 = D
59.9 and < = F

Connect Online Assignments:

Each chapter has an assigned Smartbook activity and chapter assignment, and/or chapter quiz to check your understanding of chapter topics and reading assignments. These are completed online in Connect which is accessed through blackboard. You will need to login to blackboard on the 1st day of the semester. *Students will work at their own pace prior to the final due date so don't get behind or wait until the last day to complete them.* Activities and Assignments are not timed. **This final due date is firm – no makeups for missed online Connect work will be allowed**. *See Connect description in the Appendix of Additional Information located on the last page of this syllabus.

Lecture Material:

Each week, lectures will be posted on Bb from Powerpoint presentations by your professor. Either print these out and bring to class or have them available on your laptop during class. Study them for exams!

Regular Lecture Tests/Exams (4):

The lecture exams may include both objective questions (multiple choice, matching, etc.) over text materials, and readings as well as descriptive questions requiring detailed explanations over broad themes. Success on the exams is a function of anxiety regulation, test prep, study strategies, and studying for retention. Retention requires repetitions, which requires time! The 4 unit exams will be accessed in the classroom setting unless they need to be done in the testing center (which prior approval from Dr. Mac and student services). Each exam is 100 questions worth 100 points. ***Tests cannot be made up for any reason without prior communication to your instructor on extreme situations.*** Any missed exam will be recorded as a zero (0) and can only be made up with the final exam grade counting twice at the end of the semester to replace the zero. The final exam is worth 200pts (see below). Scantrons are required for each exam. Late arrivals must complete exam by the end of class time. Each exam will have 10 bonus questions over figures or pictures or

photomicrographs from the lecture material. A review will be provided for each.

Final Lecture Exam
A 100 pt final exam will be given during the time set forth by the college Final Exam Schedule. The final exam will consist of 100 objective questions (multiple choice, matching, etc.) from chapters chosen by your professor TBA. There will be 10 bonus questions as usual. A scantron is required for the final exam. ***No makeup for any reason on the final exam.***

Weekly Quizzes:
Each week you will take a quiz worth 10 pts (with 2 bonus pts on fill-in-the-blank questions) on lecture material covered the prior lecture period. Every other quiz is entirely bonus, that is, every odd numbered quiz will be worth 12 pts total. Every even numbered quiz counts for a grade against 10 possible pts. **You must be in your seat once the quiz begins to take it.** I will begin the quiz promptly at 11am. If you are late for any reason, you cannot take the exam. Just be punctual to class as this is an excellent way to get bonus points on quizzes done well and helps prepare you for major exams. ***Quizzes cannot be made up.*** A scantron is needed for each quiz.

Lab Pre-and-post Reports:
The lab reports from the lab manual are to be completed **before and/or during lab.** I do not take these up and grade them as these are designed to help you prepare for the Lab Practicals. I will be glad to take a look at your answers and provide feedback/discussion. I strongly advise that you do them each week as they will improve your lab grade.

Lab Practicals:
Two lab practicals will be given during the semester. Each is a live exam with stations that students will rotate through and answer mostly multiple-choice questions associated with visuals from lab exercises and handouts from the professor. Visuals may include images, specimens, lab equipment, data tables, graphs, cultures, microbes, experimental results, etc. A review will be provided for each. ***No makeup for any reason on the lab practicals.***

Required Lab Journal:
It is a requirement of this course to keep a Non-majors Biology Laboratory Notebook. The notebook will be graded by Dr. Mac at 2 different (announced) times during the semester. First grading is worth 50 pts and the final grading is worth 100 pts. The notebook should be a ***bound*** composition notebook (minimum of 50 sheets with 5 x 5 quads), available at most bookstores or Walmart. It is worth a total of 150 pts. More in lab on how to keep a good journal.

***Optional* Class Report:**
You will provide an optional special written report in this class on topics provided by the instructor. First come, first serve. This is entirely optional! It will be worth 100 pts. *I do suggest you do it to improve or pad your grade.* More later…

Cell Phones and Unapproved Electronic Devices: Absolutely NO video cameras, tape recorders, beepers, MP3 players, I-pods, or other unapproved electronic devices are to be used during class/lab. You may use your lab top. You may also turn your cell phone to a silent buzz (but not during any exam) and excuse yourself from the classroom/lab if you absolutely must answer the call.

(emergencies only!). Examples would include sick children and/or seniors or other family members who need your immediate help. It is wise to leave your phone in your car on test days!! Students found using their cell phones or other devices during class will ***lose 10 pts*** from their total class score for each offense. **THIS INCLUDES TEXTING!!** ***Please make it a habit to turn cell phones OFF or on vibrate before class begins each day. Phones are never to be on during any sort of examination. If your phone rings during any exam, you must immediately turn in your exam and receive the grade you earned on all questions whether or not you completed that exam (probably an "F"). No one to blame but yourself!***

Communications: NTCC email is the official form of communication used by the college. The instructor will respond to student emails within 24 hours of receipt. **You should NOT expect an immediate response from your instructor in reply to your email.** While I will try to respond in a timely fashion, I do not always have my phone on my person, and I do not have notifications set on my phone to alert me the moment an email arrives in my inbox. (On the weekends it may be up to 48 hours after receipt of email.) Feedback and grades on assignments and postings will be posted 48 to 72 hours after due date/time of assignment.

Institutional/Course Policy: Northeast Texas Community College is a "community of scholars." Please remember that you and all students in this class are pursuing very important goals in your lives. As scholars, I expect every student to be courteous to other students and the instructor in all online experiences. As your instructor, I will make a conscientious effort to provide you with a variety of teaching and learning formats to help you in your efforts to be successful in environmental science.

I care about your learning experience and your success in this course, however that ultimate success does depend largely on **YOU**. Your success can be maximized and your potential achieved by making the commitment to meet these online expectations:

1. Schedule and plan to complete all lecture and laboratory assignments and submit them when they are due. Be sure to print off the calendar to help you keep up with assignment due dates. Late assignments are not accepted unless the student can provide a compelling reason for submitting late work. No tests or exams may be taken late.
2. Be sure to do all your own work. Collusion and plagiarism are acts of academic dishonesty.
3. The last day to drop the course with a grade of W is Thursday, **April 10th.** If circumstances require you to withdraw from this course, you must do so by that date. It is the student's responsibility to initiate the withdrawal with the registrar's office. Failure to officially withdraw will result in your receiving a grade of F.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements In the event of an emergency or announced campus closure due to a natural disaster, pandemic, or weather-related closure, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same

delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:
Absent from a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. **(Adapted from the Stanford University Office of Community Standards-- accessed August 31, 2023)**

NTCC Academic Honesty/Ethics Statement:
NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:
It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request

in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Eagle Assist

At Northeast Texas Community College, we understand that students often need support that extends beyond the classroom. "Eagle Assist" is the place to start when looking for that type of assistance. Our support system is here to help you succeed in both your academic and personal growth. www.ntcc.edu/eagleassist

Services provided:

- Mental Health Counseling
- Classroom Accommodations
- NTCC Care Center Food & Hygiene Closet
- Financial Literacy
- Students with Children
- Emergency Aid

Tutoring

Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, mental health, alcohol or other drugs, identities, finances, etc.

Mental Health Counseling Services are available on campus- in person and online - to all NTCC students at no cost. If you are experiencing concerns, seeking help is a courageous thing to do. You can also contact us directly at counseling-center@ntcc.edu

- Child Care Assistance
- Emergency Aid

Can't find what you are looking for? Send us a message at eagleassist@ntcc.edu

Mental Health Counseling Services are available to all NTCC students.

- Visit the following page to get your account activated: www.thevirtualcaregroup.com/ntcc

---

Tentative Lecture Timeline ***(*note* instructor reserves the right to adjust this timeline at any point in the term, including test dates):***

Week 1-T-Th (Jan 21, 23)	Syllabus & Chapter 1 Understanding Our Environment
Week 2-T-Th (Jan 28, 30)	Chapter 2 Principles of Science and Systems
Week 3-T-Th (Feb 4, 6)	Chapter 3 Matter, Energy, and Life
Week 4-T-Th (Feb. 11, 13)	Chapter 4 Evolution, Biological Communities, and Species Interactions
Week 5-T-Th (Feb. 18, 20)	Chapter 5 Biomes: Global Patterns of Life
	Exam 1 (Chapters 1-5)-Feb. 20
Week 6-T-Th (Feb. 25, 27)	Chapter 6 Population Biology & Chapter 7 Human Populations
Week 7-T-Th (Mar. 4, 6)	Chapter 8 Environmental Health and Toxicology

Week 8-T-Th (Mar. 11, 13) Chapter 9 Food and Hunger & Chapter 10 Farming: Conventional and Sustainable Practices

Exam 2 (Chapters 6–10)-Mar. 13

****************************Spring Break (Mar. 17-21)*******************************

Week 9-T-Th (Mar. 25, 27) Chapter 11 Biodiversity: Preserving Species & Chapter 12 Biodiversity: Preserving Landscapes

Week 10-T-Th (Apr. 1, 3) Chapter 13 Restoration Ecology

Week 11-T-Th (Apr. 8, 10) Chapter 14 Geology and Earth's Resources & Chapter 15 Climate Systems and Climate Change and Chapter 16

Exam 3 (Chapters 11-16)-Apr. 10

Week 12-T-Th (Apr. 15, 17) Chapter 17 Water Use and Management; & Chapter 18 Water Pollution

Week 13-T-Th Apr. 22, 24) Chapter 19 Conventional Energy; & Chapter 20 Sustainable Energy

Week 14-T-Th Apr. 29, May 1) Chapter 21 Solid, Toxic, and Hazardous Waste

Week 15-T-Th (May 6, 8) Chapter 24 Environmental Policy, Law, and Planning; & Chapter 22 Urbanization and Sustainable Cities

Exam 4 (Chapters 17–22, & 24)-May 8

Optional Class Report due: 5/8

All Connect Assignments due 5/8

Week 16-May 15 (9:30-11:20am) **FINAL EXAM (not comprehensive, Chapters TBA)**

Biology 1401 Environmental Biology

SPRING 2025 - *Tentative Laboratory Schedule-Dr. Mac

WEEK	DATE AND DAY (Tues)	*LABORATORY ASSIGNMENT (handouts or lab manual)
1	Jan. 21	Welcome to lab; Exercise 7 Human Pop dynamics (lab manual)
2	Jan. 28	Exercise 8 Plate Tectonics (lab manual)
3	Feb. 4	Exercise 14 Evaluating Renewable Energy Sources (lab manual)

4	Feb. 11	Exercise 11 Personal Energy Consumption (lab manual)
5	Feb. 18	Exercise 19 Global Indicators of Climate Change (lab manual)
6	Feb. 25	Exercise 20 Evaluating Ecological Footprint Calculations (lab manual)
7	Mar. 4	Exercise 22 Solid Waste Assessment (lab manual-*DO AT HOME!-collect data for 3 days)*
8	Mar. 11	**Lab Practical # 1 – Labs 1 – 7** **Turn in lab journal #1**
	Mar. 17-21	**************SPRING BREAK****************
9	Mar. 25	Quality of Natural Waters: Biological Factors (handouts) a. Temperature testing b. DO testing c. BOD testing procedure
10	Apr. 1	Quality of Natural Waters: Biological Factors (handouts) a. Total dissolved solids testing

		b. Coliform testing procedure
11	Apr. 8	Acid deposition (handout)
12	Apr. 15	Oil Spill bioremediation (handout)
13	Apr. 22	Cultural Eutrophication and Biodegradable waste (handout) Soil Productivity (handout)
14	Apr. 29	Agriculture and Feeding a Growing Human Pop (handout) Exercise 6 Historical Changes in Human Pop Characters (handout)
15	**May 6**	**Lab Practical # 2 (labs 8-14)** **Turn in final lab journal**
16	**May 12-16**	FINAL EXAM WEEK

DISCLAIMER NOTE: The instructor reserves the right to alter this syllabus/schedule as necessary with full disclosure & prior notice to the student.

Appendix of Additional Information:

***What is McGraw-Hill Connect?**

The McGraw-Hill Connect provides you with access to your eBook. Additionally, within each Connect Folder in Blackboard you will see a link to three different activities: 1) SmartBook, 2) Chapter Assignment, and 3) Quiz.

1) **SmartBook assignments are figured into your course grade**; This guided reading helps identify areas that you are having trouble understanding and provides you with some "tutoring" in those areas.
2) **Weekly Quizzes are required and figured into the course grade**. Quizzes are usually 12 questions. Please use these quizzes to determine whether you have a true understanding of the material.

Inclusive Access: We have negotiated with the Publisher to obtain a discounted price for your lecture course materials. Your ebook and Connect Access Code are included with your tuition and will be available through Blackboard on the first-class day (use the link found on the Bb course homepage). The materials are required for your class and essential in your success. If you also determine that you would like a print copy of your text in addition to your inclusive access loose- leaf copies will be available in the College Store at a discounted price. You may opt out of purchasing your materials from the College Store through the Census Date for the course. If you choose to opt-out you will be responsible for purchasing your Connect Access Code from another vendor. You will receive a refund for the Inclusive Access if you opt out.

Notes: