

# SYLLABUS

## Natural Science 2110 – Environmental Science for Teachers

### Fall 2024

**Instructor:** Chuck Schick  
**Email:** [cschick@unm.edu](mailto:cschick@unm.edu) or MS Teams class DM feature  
**Office Hours:** Health Sciences Rm 111 Monday 3:30PM-4:30PM Thursday 3:30PM-4:30PM or by mutual agreement. When you need a meeting, we will find a way to meet.  
**Course Textbook:** Environmental Science (towards a sustainable future) 13th Ed. Wright and Boorse

### CLASS SCHEDULE

Week No.	Week of:	CLASS TOPICS	LAB activities
1	Aug 19	Course Overview, Requirements, Policies, etc. Stewardship and Sound Science. What is the difference between science and advocacy?	Observation lab (outside)
2	Aug 26	Overview of our planet: The basics, planetary position, Atmosphere, hydrosphere, and land masses  Discuss Current Events #1 topic and presentation	Data collection, analysis and modeling exercise including prediction
3	Sept 2	No Class Monday Labor Day. Ecosystems, Structures, biotic & abiotic relationships. Food Web. The flow of energy in the ecosystem	CO <sub>2</sub> Trends, plot the trend, make the prediction, verify prediction with recent online data
4	Sept 9	Populations, relationships, succession  <b>Current Events #1 Any related subject (discuss details in class before presentation)</b>	Population Lab Measure O <sub>2</sub> and CO <sub>2</sub> in the environment/classroom and you?
5	Sept 16	Human Population Trends: Where are We? Where are we going? How fast? Population Problems. TEST #1 REVIEW <b>*Select a research presentation Topic</b> (discuss details in class)	Measuring mass and density
6	Sept 23	<b>TEST#1</b> Hydrologic Cycle (overview)	Topo maps exercises
7	Sept 30	<b>Current Events #2 TOPIC, CENSUS:</b> Download or locate and present a topic from the Census that is applicable to population growth trends (Present to class. Summarize the data and tell the class YOUR INTERPRETATION for the future.  Hydrologic Cycle, Groundwater, Surface Water and Pollution in Storm Water Runoff. Introduction to P2 issues. Brief explanation of current Storm-water Regulations, Surface water Regulations, Groundwater Regulations and their importance for environmental protection. What the EPA does NOT regulate too!! Soil and the Soil Eco-system.	Lab MAP MAKING LABORATORY, <i>Dress to be outside on campus (shoes).</i>  <i>Or Groundwater Table mapping</i>

8	Oct 7	Hydrology, Climate and Weather (Continued) Food Production and Distribution	Temperature & humidity Lab
9	Oct 14	Species Protection and Bio-diversity, Habitat Control Threatened versus endangered species	<b>TBD</b>
10	Oct 21	Species Protection and Bio Diversity, Habitat management  TEST #2 REVIEW!!	Soil Sample Collection (collect soil cores at two locations on campus for analysis)
11	Oct 28	<b>TEST #2</b> Overview of Environmental Regulations and Controlling Government Agencies. Who does what and why (USEPA, NMED, RCRA, CERCLA, OSHA). Plus, Web sites for these agencies and others for your classroom.	Grain size analysis of soil samples
12	Nov 4	Pesticides and Herbicides- What is bugging you and how do pesticides work?  <b>Current Event #3 Present an Earth day school activity suitable for elementary school age students</b>	Groundwater contamination Lab
13	Nov 11	Water Pollution: Soil, Groundwater, and Water Remediation Techniques: Such as physical, biological, and intrinsic natural attenuation	pH lab, Collect groundwater samples from our research well.
14	Nov 18	Landfills, Solid Wastes, Disposal, recycling etc. Everything you ever wanted to know about Subtitle D Landfills, hazardous waste landfills and special waste landfills. HAZARDOUS CHEMICALS AND WASTE (What is the difference?), Disposal of wastes and Reduction of Exposures	Household Hazardous waste survey and Geologic Time Scale exercise (weather permitting)
15	Nov 28	ENERGY (historic, current, and future sources)  TEST #3 REVIEW <b>Present your Research Topic (to the class)</b>	Chemical analysis of soil samples
16	Dec 2	<b>TEST #3</b> Wrap up class (review information for final exam) <b>FINAL EXAM Wednesday December 11 4:30PM to 6:30PM</b>	Lab wrap up

**Make-up Tests: No** Make-up Exams. See Grading Policy below. Also, we cannot make up labs. So be there. ALSO, most of the labs are impossible to make up.

**Grading Policy:** Tests will be approximately 60% of Grade. Best 3 out of 4 Exams (Including the Final). Research project will count for 20% of your Grade. Current event presentations, labs, attendance, and games will be assessed at 20%. All percentages are approximate. The goal of grading is to provide you with multiple methods for demonstrating your knowledge and proficiency in the material.

**Attendance:** The school's policy will be followed. Therefore, not showing up for class could result in the "system" dropping you from the class. You should attend class regularly and get your notes. I do not give out notes. Part of your education is to process lecture material and put it into your own notes. If you are not going to attend class, please let me know **BEFORE CLASS**. **Lack of attendance will reflect poorly on your final grade.**

### **Plagiarism/Cheating:**

I encourage you to talk with one another about assignments before, and while, you do them, but all submitted work must be your own. In addition, if you copy information from textbooks, newspapers, the internet or other media sources you must cite them as your source of information. Blatant copying (plagiarism) will result in zero for all students involved. A second offense will result in you receiving an F for this course. I would like to draw your attention to: The University of New Mexico's policy on "Dishonesty in Academic Matters":

### **Access:**

If you have a documented learning disability, please provide a copy of your letter from **Equal Access Services** as soon as possible to ensure that your accommodations are provided for in a timely manner.

### **Electronic Devices:**

To the benefit of you, your classmates and the learning environment **please turn off** electronic devices such as cell phones before class begins. If you wish to use a **laptop or tablet** for note-taking **please press mute** to eliminate distracting noises. Your cooperation in these matters is appreciated by all.

### **Title IX:**

[Note: UNM encourages all faculty and TAs to include a Title IX statement on the syllabus and reminds all faculty, TAs, and GAs that per university policy APPM 2740 they are mandatory reporters to the Title IX Coordinator at the Office of Equal Opportunity of reports of gender discrimination, including sexual harassment, sexual misconduct and sexual violence. Information about how to have a conversation with a student about reporting and what steps to take is available on the [Title IX Coordinator page](#). Faculty may be interested in informational resources developed by a group of UNM faculty, Faculty SAFE.]

Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and the opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at [arcsrvs@unm.edu](mailto:arcsrvs@unm.edu) or by phone at 505-277-3506.

On the UNM Valencia Campus, the accommodations coordinator is in the guidance center. After you see them, they will confidentially let me know what accommodation you will require.

### **KEEP A COPY OF THE SYLLABUS:**

It is a wonderful way to look ahead and see what is going to be discussed. And the best way is to read before class and be prepared for any pop quizzes.

**NOTE:** This schedule is an outline of what is anticipated to be covered this semester. The dates and topics are subject to change if needed. Changes will be related to you ASAP in class.

### **Tutoring Services**

Not sure if you will need this for our class but the university has asked me to include it. Here is a link to the tutor service on campus if you feel you need more help. The second link is for making an appointment

<https://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html>

<https://esurvey.unm.edu/opinio/s?s=131505>