

# SYLLABUS

## Natural Science 2110 – Environmental Science for Teachers

### Spring 2023

**Instructor:** Chuck Schick  
**Email:** [cschick@unm.edu](mailto:cschick@unm.edu) or MS Teams chat feature  
**Office Hours:** Health Sciences Rm 111 Monday 3:30-4:30 pm Tues 2-3pm and Thursday 2-3PM or by request. 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	Jan 16	Course Overview, Requirements, Policies, etc. Stewardship and Sound Science. What is the difference between science and advocacy?	No Lab (holiday)
2	Jan 23	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	Jan 30	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	Feb 6	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	Feb 13	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	Feb 20	<b>TEST#1</b> Hydrologic Cycle (overview)	Topo maps exercises
7	Feb 27	<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	Mar 6	Hydrology, Climate and Weather (Continued)  Food Production and Distribution Species Protection and Bio-diversity, Habitat Control Threatened versus endangered species	Temperature & humidity Lab

9	Mar 13	<b>SPRING BREAK!!!!</b>	<b>Break NO LAB</b>
10	Mar 20	Species Protection and Bio Diversity, Habitat management  TEST #2 REVIEW!!	Soil Sample Collection (collect soil cores at two locations on campus for analysis)
11	Mar 27	<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	Apr 3	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	Apr 10	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	Apr 17	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	Apr 24	ENERGY (historic, current, and future sources)  TEST #3 REVIEW <b>Present your Research Topic (to the class)</b>	Chemical analysis of soil samples
16	May 1	<b>TEST #3</b> Wrap up class (review information for final exam) FINAL EXAM MAY 8 at 4:30pm (per university schedule)	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.

### **COVID-19:**

COVID-19 Health and Awareness. UNM is a mask friendly, but not a mask required, community. To be registered or employed at UNM, Students, faculty, and staff must all meet UNM's [Administrative Mandate on Required COVID-19 vaccination](#). If you are experiencing COVID-19 symptoms, please do not come to class. If you have a positive COVID-19 test, please stay home for five days and isolate yourself from others, per the [Centers for Disease Control \(CDC\) guidelines](#). If you do need to stay home, please communicate with me at [cschick@unm.edu](mailto:cschick@unm.edu) so, I can work with you to keep up with the class (if possible). UNM faculty and staff know that these are challenging times. Please tell us you need support so we can connect you to the right resources and be aware that UNM will publish information on websites and email about any changes to our public health status and community response.

Support:

[Student Health and Counseling](#) (SHAC) at (505) 277-3136. If you are having active respiratory symptoms (e.g., fever, cough, sore throat, etc.) AND need testing for COVID-19; OR if you recently tested positive and may need oral treatment, call SHAC.

[LoboRESPECT Advocacy Center](#) (505) 277-2911 can offer help with contacting faculty and managing challenges that impact your UNM experience.

### **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>