# SYLLABUS GEOLOGY 1110 Spring 2022

Instructor:	Chuck Schick	
Email:	cschick@unm.edu or MS Teams messaging	
<b>Office Hours</b>	: Wednesday at 4pm via MS Teams or Zoom.	
<b>Class Times</b>	: MW 10:30 am to 11:45 am	

WEEK	Week of	TOPICS
1	Jan 17	Introduction to the class. Scientific Method Laws, Theory's and models. Know the difference. What is Geology? Why Study it? Importance?
2	Jan 24	Earthquakes and Plate tectonic forces.
3	Jan 31	Earths Basic Composition. What is a mineral? x-stals? And silicate structures Igneous Rocks Magma Differentiation and the Reaction Series.
4	Feb 7	Basic Rx types Rocks and the Geologic Records
5	Feb 14	Igneous Rocks
6	Feb 21	Metamorphic Rocks and Deformation, Pressure and Temperature. <b>Test #1 Review</b>
7	Feb 28	TEST #1 Sedimentary Rocks
8	Mar 7	Weathering Processes and Erosion Sediments and Sedimentary Processes
9	Mar 14	SPRING BREAK!!!!!!!! YES!!!!
10	Mar 21	Metamorphic Rocks (continued), Rock Cycle (or recycle).
11	Mar 28	Significant events in Geologic Time and Geologic Time <b>Test #2 Review</b>
12	Apr 4	Mass Wasting, Hydrology and Groundwater, Erosion processes TEST #2
13	Apr 11	Hydrogeology and Groundwater
14	Apr 18	Glacial Geology and Landscape Formation (Geomorphology)
15	Apr 25	Geologic Disasters, Earthquakes, seismology Test #3 Review
16	May 2	TEST #3 Wrap up class Catch up if needed on last Wednesday
		FINAL EXAM !!! (we follow the posted UNM Valencia schedule for the exam).

# SCHEDULE

# **Course Textbook:** HOW DOES THE EARTH WORK? (Physical Geology and the Processes of Science) 2<sup>nd</sup> edition by Smith and Pun

### **Course Goals:**

- 1) To introduce the principles and process of science using the study of earth science
- 2) To give each student a better appreciation of the world around them, and how it affects their lives and the lives of others

## Student Learning Objectives (SLOs):

- 1. By evaluating a set of data, the student will define a problem, pose a hypothesis, and describe how the hypothesis can be tested. (Relates to UNM/HED Area 3, Competencies 1, 2, 4)
- Students will be able to determine the relative order in which a series of geologic events occurred by applying the concepts of relative dating.
   (Relates to UNM/HED Area 3, Competencies 1, 3)
- 4. Students will be able to describe the compositional (crust, mantle, core) and mechanical (lithosphere, asthenosphere, outer core, inner core) layers that exist in the Earth. (Relates to UNM/HED Area 3, Competency 3)
- 5. Students will be able to describe the three main rock types (igneous, sedimentary, and metamorphic)
  - and how they form in the context of the rock cycle. (Relates to UNM/HED Area 3, Competency 3)
- 6. Students will be able to explain the evidence for the plate tectonic processes that occur at each of the three types of plate boundaries.
  - (Relates to UNM/HED Area 3, Competencies 2, 3)
- 7. Students will describe the processes that are responsible for specific geologic hazards (e.g., earthquakes, volcanic eruptions, mass movement, flooding, etc.). (Relates to UNM/HED Area 3, Competencies 3, 5)

### 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 a score of zero for all students involved.

#### Access:

If you have a documented access issue, please have **Equal Access Services** provide that information (confidentially) to me as soon as possible so I can create the accommodation.

#### **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 notetaking **please press mute** to eliminate distracting noises. Your cooperation in these matters is appreciated by all. Make-up Tests: <u>No Make-up Exams.</u> See Grading Policy below.

## Grading Policy:

There are Three (3) Tests and a FINAL Examination for a grand total of four (4). These tests count for 90% of your grade. Reading quizzes will constitute the remaining 10%. Quizzes are unscheduled and I will most likely increase their frequency if I sense the class is not reading ahead of class. You may drop the lowest test score (Best 3 out of 4 Exams). Poor attendance could RESULT IN YOU BEING DROPPED from the class.

**Title IX:** See <u>http://www2.ed.gov/about/offices/list/ocr/docs/</u> for information regarding these rules for a safe classroom for both students and teachers. Also, the Office of Equal Opportunity (oce.unm.edu) provides more information regarding these matters.

#### **COVID 19 ISSUES:**

Wear a mask to Class. **NO MASK, NO CLASS.** Check the UNM website for the latest news and information regarding this issue. If you are sick, stay home. Really sick. Please don't abuse the COVID issue and skip class. In person class is crucial to your success. There will probably be changes to our schedules if conditions change. **We will adjust, adapt and overcome.**