## **GEOLOGY 1110L LAB**

# Physical Geology: Laboratory Sessions SPRING 2022

Instructor: Chuck Schick Email: <a href="mailto:cschick@unm.edu">cschick@unm.edu</a>

Office hours: After Class or by appointment

Classroom: This class will meet Wednesday at 12:00N to 1:45 PM room H108 (health

science building)

Textbook (if it arrives at the bookstore): UNM-Valencia Laboratory Manual in Physical

Geology (2012), Prentice Hall. Otherwise, I'll post materials on our MS Teams site.

**Supplies:** calculator, colored pens or pencils, ruler and eraser.

Date	Topic	Pre Lab Reading
Jan 17	Introduction and Observation	See MS Teams Site each week before the lab
Jan 24	Mineral Identification	
Jan 31	Igneous Rx	
Feb 7	Metamorphic Rx	
Feb 14	Sedimentary Rx	
Feb 21	Rock dating, superposition, Geologic Events	
Feb 28	Maps, Scales, topography and symbols	
Mar 7	Geologic structures (faults, folds, etc.)	
Mar 14	SPRING BREAK	
Mar 21	Soil sampling and collection	
Mar 28	Groundwater	
Apr 4	Geomorphology	
Apr 11	More Rx and mineral Identification	
Apr 18	Mineral and Rock ID examine (hands on).	
Apr 25	Soil grain size analysis	
May 2	Wrap up, exam	

SPRING 2022 Page 1 of 3

#### Course Goals:

- 1) To introduce the principles and process of science using the study of earth science as an aide
- **2)** To present Earth system processes and products and the methods by which they are studied
- **3)** 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):**

- Students will be able to construct a hypothesis, propose a test, and then complete the test using quantitative and spatial data. (Relates to UNM/HED Area 3, Competencies 1, 2)
- 2. Students will be able to make measurements and make calculations using those measurements that lead to graphical display and interpretation of data. (Relates to UNM/HED Area 3, Competency 4)
- 3. Students will be able to analyze graphical data and use the graphs to make interpretations. (Relates to UNM/HED Area 3, Competency 2)
- Students will complete a written report that effectively communicates an interpretation of quantitative and spatial data to evaluate a societally relevant geologic problem. (Relates to UNM/HED Area 3, Competencies 3, 5)
- Students will provide written descriptions of rocks that correctly use geological terminology and links these descriptions to an acceptable explanation of rock origins.
  (Relates to UNM/HED Area 3, Competency 3 and disciplinary content)
- 6. Students will be able to interpret scales and elevations on a topographic contour map. (Relates to disciplinary content)
- 7. Students will demonstrate understanding of plate motions. (Relates to UNM/HED Area 3, Competency 4 and disciplinary content)

## Reading:

Lab materials will be identified and placed on the MS teams site before each lab. This reading is best done before each class takes place. In most cases this will allow you to **finish the lab earlier** and ultimately provide you with a much better understanding of the course material. **IT ONLY TAKES A FEW MINUTES.** 

#### **Attendance & Drop Policy:**

Due to the hands-on nature of this class, regular attendance is *necessary* for successful completion. Therefore, I strongly encourage you to make the effort to be present.

#### **Grading:**

Your final grade will be based on grades you earn from laboratory write-ups. And participation. Also, a final mineral and rock identification examination.

# **Laboratory Write-Ups:**

Write-ups for each laboratory session must be completed and handed in before the next lab.

SPRING 2022 Page 2 of 3

#### Access:

If you have a documented learning disability, please provide a copy of your letter or accommodations needs from **Equal Access Services** as soon as possible. To insure privacy, the office generally emails this information to me directly.

#### Plagiarism/Cheating:

I encourage you to talk with one another about assignments before, and while, you do them, but all written (and submitted) work must be in your own words. Blatant copying (plagiarism) will result in a score of zero for all students involved.

**Title IX:** See <a href="http://www2.ed.gov/about/offices/list/ocr/docs/">http://www2.ed.gov/about/offices/list/ocr/docs/</a> 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.

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

It is a great way to look ahead and see what's going to be discussed. And the best way 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'll 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

#### **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. Class time is crucial to your success. There will probably be changes to our schedules and university operating conditions. We will adjust, adapt and overcome.

SPRING 2022 Page **3** of **3**