

EPS 101 “Intro to Geology”

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)
2. Students will be able to state the age of the Earth and describe how geologists measure absolute rock ages by radioactive decay.
(Relates to UNM/HED Area 3, Competencies 1, 3)
3. 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 use the concept of isostasy to explain why continental crust is at a higher elevation than the oceanic crust.
(Relates to UNM/HED Area 3, Competencies 1, 2, 3, 4)
6. 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)
7. 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)
8. Students will be able to describe the geologic processes involved in formation and concentration of a significant geologic resource (examples include fossil fuels and metals).
(Relates to UNM/HED Area 3, Competencies 3, 5)
9. Students will describe the processes that are responsible for specific geologic hazards (e.g., earthquakes, volcanic eruptions, mass movement, flooding, etc.).
Rubric to follow below.
(Relates to UNM/HED Area 3, Competencies 3, 5)