



Introduction to Geology and Meteorology
2013-2014

Course Description:

Introduction to Geology and Meteorology is designed to introduce students to the basic concepts of earth science in the study of Physical Geology, Historical Geology, Earth's Water, Weathering and Erosion, Meteorology, and Astronomy. Students will study the forces that form, shape, and change the Earth.

Course Content:

Earth's Cycles and Motion (water and carbon cycles, Earth's rotation and revolution)
Maps (mapmaking, road maps, topographical maps, map projections)
Weather (heat and water in the atmosphere, air pressure, storms, forecasting)
Climate (climate types, climate controls, climatological history)
Geological History (hypotheses of Earth's formation & layers, changes in the continents)
Plate Tectonics (causes of plate motion, earthquakes, volcanoes, mountains)
Rocks and Minerals (mineral properties, rock formation, rock cycle, weathering)
Energy Resources (fossil fuel formation, alternative energy sources)
The Solar System (the planets, the Sun, meteors and asteroids)
The Universe (stars, galaxies)

Required Textbooks and/or Other Reading/Research Materials

Earth Science by Tarbuck and Lutgens. Pearson, 2011.

Course Requirements:

Students are expected to:

explain the Earth's motions, structures, and processes
address societal needs using Earth science knowledge
communicate scientific thoughts through speech and writing
perform laboratory experiments to test hypotheses
draw conclusions from scientific data

Grade Components/Assessments:

To measure the multiple intelligences of our students, a wide variety of assessments will be used in Introduction to Geology and Meteorology. Quarter grades will be determined as follows:

- 40% - Tests and Quizzes
- 30% - Projects
- 20% - Labs
- 10% - Homework/Classwork

Each marking period is worth 20% of a student's overall grade. The midterm and final exam are each worth 10% of a student's overall average:

Quarter 1	20%
Quarter 2	20%
Midterm	10%
Quarter 3	20%
Quarter 4	20%
Final	10%

Required Summer Reading/Assignments:

No Required Summer Reading