



Southern Lehigh School District

High School Syllabus

Natural Hazards

2014-2015

Course Description:

Natural Hazards explores natural events that cause extensive damage to environments. Severe weather, such as tornadoes and hurricanes, and geological happenings, like earthquakes, volcanoes, and extraterrestrial impacts and biological pathogens will be investigated both quantitatively and qualitatively. The interaction between humans and natural hazards will also be examined, including attempts to predict, control, and recover from these events.

Course Content:

- Earthquakes (plate boundaries, faults, aftershocks, frequency)
- Tsunami (tsunamigenic events, wave properties)
- Volcanoes (types, eruption properties)
- Landslides (properties, causes)
- Severe Thunderstorms (water and heat in the atmosphere, precipitation, prediction)
- Tornadoes (formation, severity, geographical distribution)
- Hurricanes (formation, severity, path)
- Winter Storms (formation, severity, precipitation, path)
- Extraterrestrial Impacts (near-Earth objects, likelihood of collision, past impacts)
- Biological Hazards (Viruses, Bacteria, Fungus, and other Parasites)

Required Textbooks and/or Other Reading/Research Materials

Earth Science by Namowitz and Spaulding. McDougall Littell, 2003.

Course Requirements:

Students are expected to:

- explain the causes and effects of natural hazards
- address societal needs using Earth science knowledge
- communicate scientific thoughts through speech and writing
- perform laboratory activities 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 Natural Hazards. Quarter grades will be determined as follows:

- 40% - Tests and Quizzes
- 35% - Projects
- 15% - Labs
- 10% - Homework/Classwork

Each marking period is worth 40% of a student's overall grade. The final exam is worth 20% of a student's overall average.

- Quarter 1 40%
- Quarter 2 40%
- Final 20%

Required Summer Reading/Assignments:

No Required Summer Reading