

Course Title: Grade 6 Earth and Space Sciences Board Approval Date: June, 2018

Credit (Secondary):

Grade Level / Course Summary with Big Ideas:

The sixth grade science curriculum, aligned with the most recent vertically aligned Pennsylvania State Standards for Science and Technology, is designed to provide students with an inquiry based, experimental design focused science laboratory experience; fostering a scientific community of learners. Students will be engaged in three over-reaching units of study within Earth and Space Sciences. These are Geology, Astronomy, and Weather and Climate. These are all connected by unifying themes and explored through authentic inquiry and design experiences grounded in the STEM framework.

Grade Level Modules (Units):

**Suggested Timeline
of Weeks or # of Class Periods/Lessons**

1. History of Planet Earth - 3 weeks
2. Earth's Materials and Systems and our Impact on them - 5 Weeks
3. The Foundations of Energy and Matter - 6 Weeks
4. Earth and the Solar System – 4.5 Weeks
5. The Universe and Stars – 4.5 Weeks
6. Roles of Water in Earth Processes - 4.5 Weeks
7. Weather and Climate – 4.5 Weeks
8. Natural Resources – 4 Weeks

Learning Activities/Modes of Formative and Summative Assessment:

Large Group Instruction
Formative and Summative Assessments
STEM based Laboratory Experiments
Experimental Design Lab Write Ups
STE(A)M Science Journals
Cooperative Group Work Projects with Rubrics
Computer Simulations
Web Based Projects
IXL Online Learning Modules

Primary Instructional Resources:

Earth Science (Holt, Rinehart, and Winston 2005)

Appropriate Internet sources and applications

Foss and Carolina Science Curriculum Laboratory Supplies

K'Nex Science Kits

