

KAMEHAMEHA SCHOOLS – HAWAII CAMPUS MIDDLE SCHOOL
Earth SCIENCE SYLLABUS 2017-18
GRADE 8 – Dr. Englund

Ua lehulehu a manomano ka ‘ikena a ka Hawai‘i
“Immense and immeasurable is the knowledge of the Hawaiians”

Mary Kawena Pukui, ‘Ōlelo No‘eau, No. 281

MAJOR OBJECTIVES

The major objectives of this Earth Science class are:

- 1.) To enable the student to *acquire a greater interest in the world* in which he/she lives, and in the living things of this world.
- 2.) To use scientific inquiry to interpret the world around us
- 3.) To understand the geological history of Earth and Hawai‘i
- 4.) Develop an understanding of Earth in the solar system
- 5.) Current human impacts on Earth’s ecosystems

MAJOR THEME

All topics will be examined in the context of how all things (living and non-living) are united.

COURSE OF STUDY

The major topics to be covered this year are:

FIRST TRIMESTER (Aug. 3 – Oct. 26): BASIC SCIENCE SKILLS / LAB SKILLS/ EXPLORING EARTH SCIENCE

Essential Questions – What is the scientific method and how does it impact us? Where does the earth fit into the solar system and universe?

- Scientific Method / The nature of science
- Exploring Earth Science, metric system, Earth in the solar system
- Laboratory tools / safety / expectations
- Science Skills – observation, inference, prediction, communication, measurement, classification, defining procedures, formulating a hypothesis, experimentation, recognition of variables, data interpretation, making / revising conclusions, formulating generalizations / models.

SECOND TRIMESTER (Oct. 30 – Feb. 14): INTRODUCTION TO GEOLOGY AND ASTRONOMY

Essential Questions – How did the Hawaiian Islands form, and how does plate tectonics impact us on the Big Island? What is our place in the solar system, galaxy, and universe? Why is astronomy so important to the Big Island’s economy? How do we travel into space?

- Plate tectonics and continental drift
- Introduction to Astronomy and model rocketry
- The moon, solar system and the planets
- Space travel, optics, and telescopes

THIRD TRIMESTER (Feb. 20 – May 26): MAPPING NATURAL RESOURCES, HAWAIIAN FISHPONDS, TOPOGRAPHIC MAPPING, USING THE GPS AND GOOGLE EARTH

Essential Questions – How do scientists map and assess natural resources, what are some technologies scientists currently use to map natural resources, and what can we do to conserve limited resources?

- Meteorology: Climate, Earth’s Weather, Global Warming
- Conservation Biology
- Fire Ant Lab
- Hawaiian Fishpond lab
- Advanced GPS use and learning how to effectively use Google Earth (may also use earlier in the school year)
- Electronics and Robotics

APPROACHES TO MEET OBJECTIVES

The following methods will be utilized to meet the class goals: Observations, investigations, experiments, lecture, demonstrations, independent and group study / research, audio-visual presentations, home projects, textbook activities, class projects, guest presentations, games, computer / internet activities, interviews, field trips.

MATERIALS

Students are expected to bring the following materials:

- *School planner
- *Marble notebook will be required
- *Pencil, *Pen (BLACK or BLUE ink only)
- *Binder paper
- * Textbook will be provided: Earth Science by Prentice Hall, xerox copies of text will be provided if student needs extra time to complete text assignments

GRADING EXPECTATIONS

Assignments will be graded on the following standard scale percentages (see page 13 of Student Handbook):

A	93-100%	A-	90-92%	B+	87-89%	B	83-86%
B-	80-82%	C+	77-79%	C	73-76%	C-	70-72%
D+	67-69%	D	63-66%	D-	60-62%	F	50-59%

- ***Summative assessments** (tests/labs/projects) are worth 80% of the final grade
- ***Formative assessments** (homework) are worth 20% of the final grade
- *Late assignments and/or projects (not due to illness) will be given a reduced score
- *Incomplete assignments will not be accepted. All work must be completed before term grades are issued. Missing or incomplete assignments will be given a zero if not completed according to the KS Connect upload schedule

ABSENT WORK

*Absent / make up work - It is the students’ responsibility to check with the teacher about any missed assignment. All missed work should be made up as required by the teacher.

*Planned absences – When an absence is planned, please inform the teacher with a letter at least one week in advance. Assignments can be prepared in advance.

*Extra credit work – No “extra credit” work is given in this class (*Except* if students choose to do a Science Fair project on their own). It is expected that all students complete all assignments to the best of their ability.

STUDENT PLANNER

When used properly and consistently, the student planner can be a powerful tool. Since it is essential for the success of all students, the planner will be checked weekly in advisory for:

- Accurate copying of homework assignment from the board (word for word)
- Parent comments / questions

It will also be the primary means of communication between teacher and parent. Parents must check the planner daily.

BEHAVIORAL EXPECTATIONS

The specific behavior expectations for this class are taken from the Middle School Student Handbook and can be summed up with the words “RESPECT” and “INTEGRITY”. Violations for these expectations will result in consequences outlined in the Middle School Student Handbook.

SCIENCE-RELATED OPPORTUNITIES

Students who choose to go beyond what is expected in science (and other) classes **may** have the opportunity to participate in field trips, or with Dr. Englund’s field research projects (that are scheduled for small groups at various times). Students who choose to do Science Fair as an extra credit project and do well may participate in the State Science and Engineering Fair starting at UH Hilo. Students are encouraged to do their best so they can participate in these outstanding learning opportunities!

I may be contacted at:

982-0469 (classroom #)
982-0400 (middle school clerk) - leave a message
roenglun@ksbe.edu (e-mail)

Please sign, cut and return the bottom only.

I have read the syllabus and understand what is expected in this Earth Science class.

STUDENT NAME (print) _____ PERIOD _____
STUDENT SIGNATURE _____ DATE _____
PARENT (GUARDIAN) SIGNATURE _____
PARENT (GUARDIAN) PHONE# _____
Parent (Guardian) email: _____
Parent (Guardian) email: _____
QUESTIONS / COMMENTS: