



Academia Santa Rosa

Bayamón, Puerto Rico

academiasantarosa@srpr.org

Earth Science Syllabus 2023-2024

Course Title: Earth Science

Teacher: Miss Lisa M. Dillon

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Credit:1

Platform : Grades Garden, Google Classroom and Edusystem

Office Hours : By appointment.

I. Course Description

The Earth Science course presents fundamental concepts and skills to promote the development of critical thinking. The course integrates the use of technology to help students understand basic concepts. As part of this course, EduSystem has been implemented to enhance students' performance with the usage of technology. Textbooks have been substituted by a digitalized, dynamic, and updated technological system. The course will offer a variety of interactive lessons in which both teachers and students will create, explore, and evaluate each lesson. EduSystem provides: a full complement of units that meets or exceeds the Common Core Standards for the course, integration of 21st century skills required for the modern workplace, technology fully integrated into every lesson.

II. Course Objectives

A. General

The main objective of Earth Science is that students will value and use science as a process of obtaining knowledge based upon observable evidence. Science will contribute in the development of critical and creative thinkers capable of communicating effectively to deal with the high expectations and demands of society, contributing to preserving and conserving natural resources, life, and environment. Students should be active learners. Students should observe, inquire, question, formulate, and test hypotheses, analyze data, report, and evaluate findings.

B. Specifics

- Use science process and thinking skills
- Manifest science interests and attitudes
- Understand important science concepts and principles
- Communicate effectively using science language and reasoning
- Demonstrate awareness of the social and historical aspects of science

- Use technology to have interactive lessons
- Use computer programs and Internet websites
- Participate in classroom discussions and give class presentations
- Use technology to improve skills
- Listen, take notes, and comprehend a variety of themes
- Acquire vocabulary needed to obtain and process information
- Use Scientific Method and thinking skills
- Manifest scientific attitude and interests
- Demonstrate understanding of Science concepts, principles and systems
- Communicate effectively using Science language and reasoning
- Demonstrate awareness of social and historical aspects of Science
- Demonstrate understanding of the nature of Science

III. Reasonable Accommodations

- All reasonable accommodations for the particular needs of these students will be made in accordance with the Americans with Disabilities Act (ADA).

IV. Cell Phone Policy

- Students are not allowed to use cell phones during class unless the teacher explicitly approves it on a specific day for instructional purposes. When entering the classroom, all students must place their cell phone in their assigned area of the classroom or another assigned location specified in the front of the room by the teacher. Once placed in the cell phone holder area, students cannot access their phones during class hours, unless they leave early from the school facilities.

V. Necessary in class resources

- According to the school's policy, personal computers must be fully charged and taken to each class period. Students will not ask to charge school devices in the classroom and do not have the right to recover tasks lost due to depleted batteries. The lack of load of the devices constitutes an interruption of class procedures and can lead to disciplinary measures.

VI. Plagiarism

- Plagiarism is to present another person's words or ideas as if they were completely own. Plagiarism is a violation of the Code of Honor. The acts of plagiarism may include, but are not limited to: 1. Use words or ideas from a source published or from the Internet without the appropriate permission; 2. Use someone else's work (e.g., copying another student's assignment, composition or project into theirs in whole or in part; 3. Through the excessive use of editing suggestions from another student, teacher, parent, guardian or paid author.

VII. Course Content

- A. Unit 0: Methods of Science
 - Understanding Science
 - Measurement and Science tools

B. Unit 1: Mapping Earth

- Maps
- Technology and Map making

C. Unit 2: Earth's Structure

- Spherical Earth
- Earth's Interior
- Earth's Surface

D. Units 3 & 4: Rocks and Minerals

- What is a mineral?
- How are minerals identified?
- Sources and uses of minerals?
- Rocks and the Rock Cycle
- Igneous Rocks
- Sedimentary Rocks
- Metamorphic Rocks

E. Unit 7: Plate Tectonics

- The Continental Drift Hypothesis
- Development of a Theory
- The Theory of Plate Tectonics

F. Unit 8: Earth Dynamics

- Forces that Shape Earth
- Landforms at Plate Boundaries
- Mountain Building
- Continent Building

G. Unit 9: Earthquakes and volcanoes

- Earthquakes
- Volcanoes

H. Units 10 & 11: Clues to Earth's Past and Geologic Time

- Fossils
- Relative-Age Dating
- Absolute-Age Dating
- Geologic History and the Evolution Theory
- The Paleozoic Era
- The Mesozoic Era
- The Cenozoic Era

I. Units 15, 16 & 17: Earth's Water, Oceans, and Freshwater

- The Water Planet
- The Properties of Water
- Water Quality
- Composition and Structure of Earth's Oceans
- Ocean Waves and Tides
- Ocean Currents
- Environmental Impacts on Oceans
- Glaciers and Polar Ice Sheets
- Streams and Lakes
- Groundwater and Wetlands

- J. Units 19 and 21: Exploring Space and The Solar System
- Observing the Universe
 - Early History of Space Exploration
 - Recent and Future Space Missions
 - The Structure of the Solar System
 - The Inner Planets
 - The Outer Planets
 - Dwarf Planets and other Objects

VIII. Evaluation Criteria and Methods

- a. Exams (2/quarter)
- b. Assessments (2/quarter) Pop Quizzes will be given
- c. Special work
- d. Homework
- e. Notebook (100 pts/ Semester)
- f. Oral report (100 pts)
- g. Research work (100 pts)
- h. Scientific Fair (100 pts.)
- i. Daily class
- j. Laboratory (100 pts.)

IX. Distribution of Grades

- a. 90- 100 A
- b. 80-89 B
- c. 70-79 C
- d. 60-69 D
- e. 59- 0 F

X. Course Requirements

- To understand the evaluation criteria and grading process to be used for the final grade.
- The student will be responsible of keeping a record of the grades per trimester.
- To maintain the uniform neat, complete, and in accordance with the Student Manual.
- The Student Manual, part IX, states that: boys cannot use accessories such as earrings, sunglasses, necklace, caps, hats, headbands, or any other thing on the head. Girls can use subtle makeup and neutral color nail polish. Girls cannot use head accessories (except black and white), bandanas, acrylic nails, necklace, or bracelets.
- To attend and be punctual, except with reasonable excuse.
- To remain in the Academia Santa Rosa during school hours.
- To bring warnings and documents properly signed by the parents and/or person in charge (cannot forge the signature).

- Use proper and respectful vocabulary.
- Bring written excuse when absent. It must be clear, and it has to include the student's name, group, reason, date, and signed by the parent or person in charge.
- To bring all the assigned materials, computers, and books every single day. If for any reason, a parent brings any material to the student, he or she must leave the material at the office, and the student will be called to pick it up during recess or lunch hour. The student must wait to be called.
- The student will be responsible to complete every activity, homework, or project alone.
- If the student is absent, he or she will be responsible to complete any activity, homework, class work, or material given in class. If the student was absent for a test, must be ready to take it when he or she returns to school.
- The student must bring an excuse to be able to take the test, if not the evaluation will be 0%.
- For satisfactory performance, students will complete assigned homework and reading assignments by the due dates and pass quizzes and tests on the content.
- Care about your work.
- Listen to, question, and discuss the material in class. Ask relevant questions during class, pay attention and listen to the teacher. Do not interrupt when other people are talking.
- Behave with courtesy toward other students and the teacher.
- Raise your hand for questions. No heads down on desks and no feet on tables or chairs.
- Return classroom materials, desks, tables, and chairs to their proper place after use, and at the end of each class period.
- Ask permission before opening windows, using a computer, and other materials.
- Be gentle with classroom equipment, including computers.
- Take objects to the trash can.

***This syllabus is subject to change according to the student's needs, given the learning experiences, and other factors that may arise.**



Regulations for Parents and Students

General Criteria

- Once given the passwords, it is the responsibility of the student to enter daily to ALL platforms.
- The emails assigned by the institution as well as the passwords to enter the platforms and / or video-audio conferences are for academic purposes so it is not allowed to disclose such information.
- For all types of communication you must make use of your first and last name.
- The student will be responsible for the material, for staying informed, for verifying the assigned tasks daily and for maintaining direct communication with the teacher at all *times*. **The teacher is not responsible for reminding the student of overdue tasks.**
- Respect the school schedule (**schedule 7:30 am – 2:30 pm**). All communication will be during school hours; messages received after this time will be **replied to the next day.**
- All tasks and/or jobs must be received through the platforms designated by the administration.
- Assigned assignments must be delivered on time and within school hours, otherwise the first two days of arrears will lose points. After the two days you will get zero at work.
- The assigned jobs and/or tasks must be original to the student. Plagiarism will be sanctioned by the administration.
- The student must remember and keep their credentials up to date in order to attend the video conferences and be able to enter the platform.
- To avoid confusion, the student must register only once in them.
- The student must write emails using the rules of courtesy and respect for each teacher.

***The administration and/or institution reserves the right to establish new rules or to make changes to those already established as it deems appropriate.**



Santa Rosa de Lima Academy
Bayamón, Puerto Rico
Science Syllabus Reading Certification

Student Name: _____

Date: _____

Grade and group : _____

I hereby certify that I received and read my child's record for the course of higher level sciences, Earth and Space Science, Biology, Chemistry or Physics (Mark the corresponding course) for this school year 2022-23.

Student's Name

Student's Signature

Guardian's Name

Guardian's Signature

Teacher's initials

***This document must be signed and returned during the first week of classes.**