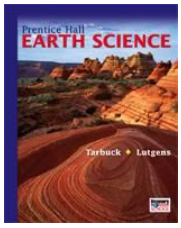

Earth Science GUIDELINES and SYLLABUS

Classroom Rules:

1. Follow Directions!
2. No Eating or Drinking in Classroom/Lab
3. Clean-Up after Yourself
4. Respect Your Classmates and their Property; This classroom is a Safe Zone!
5. Cell Phone/Chromebook Policy: NO unauthorized picture taking or video recording, NO social media (including, but not limited to, Twitter, Snapchat, GroupMe, and Instagram), and NO talking on phones during class. Using Cell phones/Chromebooks to take pictures, record videos, and browse the web is ONLY allowed for educational purposes and at TEACHER'S DISCRETION; NO phones during assessments!
6. iPod Policy: Music players used ONLY at TEACHER'S DISCRETION; Headphones/earbuds (including wireless) are NOT to be worn during lectures and discussions

Consequences of Inappropriate Behavior:

1st Offense: Verbal warning, with an exception to Rules 5 and/or 6: Cell phones/Chromebooks/ headphones/earbuds will be immediately CONFISCATED if Rules 5 and/or 6 are disregarded!

2nd Offense: 15-minute detention, either before- or after-school, *to be served by 3:30 PM the following school day*. If this detention is not served, a discipline report will be filed with the Assistant Principal, resulting in a detention assigned by the Assistant Principal.

Severe Clause: Any student may be immediately sent to the Assistant Principal if an incident warrants it.

High School Network (Computer) Policy:

Continuous infractions of the Acceptable Use Policy (AUP) may result in removal from the class with a failing grade.

Expectations:

✏ Be considerate and respectful of others. Again, this classroom is a Safe Zone!
✏ Be attentive. My "welcome" is your cue to give me your full attention.
✏ Be prepared. Come to class with the appropriate materials and assignments.
✏ Use class/lab time appropriately.
✏ Adhere to Laboratory Safety Rules when in the laboratory.
✏ Adhere to school rules in the student handbook.
✏ Come to class with a positive attitude and always give your best effort.

Daily Supplies:

✏ Pencil/Pen ✏ Binder or Folder ✏ Charged Chromebook
✏ Paper for Notes, etc. ✏ Textbook (available in class or for checkout)

Grading:

Semester grades will be based on summative assessments (unit tests), labs and activities, practice (GCFAs, unit quizzes, assignments, bellringers, etc.), and a semester exam. *Semester grades are calculated as follows: 40% summative assessments, 24% labs and activities, 16% practice, and 20% semester exam*.
Grading scale is as follows:

100 – 98 A+	89.9 – 87 B+	79.9 – 77 C+	69.9 – 67 D+	59.9 – 0 F
97.9 – 93 A	86.9 – 83 B	76.9 – 73 C	66.9 – 63 D	
92.9 – 90 A-	82.9 – 80 B-	72.9 – 70 C-	62.9 – 60 D-	

Note that grades are not rounded

✏ Grades are calculated and updated as soon as possible. Current grades are posted on *Infinite Campus*. Students *and parents* are strongly encouraged to track progress frequently. Infinite Campus can be accessed directly at: https://sycamoreil.infinitecampus.org/campus/portal/sycamore.jsp or via the district homepage.

✏ Retake Policy: Retakes on *unit quizzes* (NOT summative assessments) are encouraged. Any student earning less than 83% on a *quiz* is eligible to retake the quiz *after completing and submitting a quiz corrections sheet*. Note that *the retake grade is the grade that is entered into the grade book*. Retakes are offered *once per quiz*, only permitted *prior to* a unit's summative assessment, and must be completed *outside of class time*.

✏ Late Work Policy: Assignments (class work, lab work, projects, etc.) handed in *after* the due date will be accepted with a 50% deduction in the student's score if the assignment is handed in *prior to* the corresponding summative assessment. Assignments handed in after the summative assessment will earn *no credit* ("zero" points).

✏ Any student suspected of or found cheating on a summative assessment or unit quiz may receive a grade of "zero." Any students found copying labs, activities, projects, or assignments will split the grade of the finished product. *Note: Any use of a cell phone during an assessment will be considered cheating* due to the ability to tweet, snapchat, instagram, take pictures, browse, etc.

Other Important Policies:

✏ It is EXPECTED that students will review for Earth Science *every day/evening* for 5-10 minutes. "Repeat to remember; Remember to repeat."

✏ A student will be given one day to make up missed assignments for each day of an *excused* absence. For example, if a student misses two days of school, that student will have two days after returning to school to make up missed assignments. *It is the student's responsibility to make up any missed assignments, including unit tests and quizzes, labs, and activities.*

✏ All assignments (class work, lab work, projects, etc.) due on the day of a *prearranged* absence must be completed *in advance*, unless otherwise arranged with the teacher. Failure to complete assignments *in advance* may result in a *50% deduction* in the student's score for the work. This includes assignments that are due on days of sporting events, field trips, school functions, and vacations!

✏ If a student misses a lab or activity the student is still responsible for the material gained through that experience. *Time is of the essence in regards to making up labs and activities*. It is the *student's responsibility* to discuss makeup options with the teacher immediately upon their return from an absence.

Due to their nature, some in-class activities and demonstrations may not be made-up

Earth Science Resources Online:

✏ Students will be utilizing Google Classroom throughout the year. *Check Classroom frequently* for assessment and other due dates, assignments, notes and study guides, class updates, and helpful tips. Students will complete formative assessments on Google Classroom (GCFAs). Each student is allowed *three attempts for each GCFA*; the highest grade will be entered into the grade book. GCFAs submitted *after* the due date will be accepted with a 50% deduction in the student's score if the assessment is submitted *prior to* the corresponding summative assessment. Google Classroom FAs submitted after the summative assessment will earn *no credit* ("zero" points).

Additional Resources:

✏ I am available during 3rd or 9th periods or before school starting at 7:45 AM and after school until 3:45 PM if you need additional help or clarification. Appointments would be greatly appreciated, especially if you would like to meet before or after school. One other method of contacting me is via email. My email address is: Polson@syc427.org . (Please note that I will not answer emails after 8 PM.)

✏ After-school tutoring with a certified teacher is available in the library on Tuesday and Thursday afternoons from 3:15-4:15 and on Sunday evenings from 7:00-9:00.

✏ Before-school tutoring with National Honor Society students is available in the library on Thursday mornings during "Late Start" (8:15-8:45).

Keep these sheets in your science binder/folder for future reference.

----------*Sign Below*----------

I have read the course guidelines for Earth Science and fully understand the stated policies and what is expected in this class.

_____

Student's Printed Name Class Period

_____

Student's Signature Date

_____

Parent/Guardian's Signature Date

Earth Science COURSE DESCRIPTION

Earth Science is a course that helps promote understanding and appreciation of the value of earth science and its applications and relevance to our daily lives. Key topics covered include: the scientific method, astronomy, plate tectonics, surface processes (weathering, erosion, and deposition), minerals and rocks, geologic time, and meteorology and climate. The course is activity-based and participatory in nature, consisting of discussions, demonstrations, investigations, projects, and various other activities, including multimedia. Daily review is expected. If there are any questions regarding grading or lab and assignment policies, please refer to the "Earth Science Classroom Guidelines."

This course is designed for the general and/or college-bound student and is NCAA-approved.

Earth Science SYLLABUS with OUTCOMES

The following is a tentative schedule of the subject areas we will be studying this year.

Weeks 1-9

Outcome S.ES:1 Scientific Inquiry and Science Process Skills: Students will employ the steps of scientific inquiry, utilize science process skills, and practice safety techniques and procedures in all laboratory work over the course of the school year.

Outcome S.ES:14 Astronomy (Modern Astronomy, Universe, Stars, and Solar Systems): Students will describe the tools of modern astronomy, use Big Bang theory to explain the origin and structure of the Universe, use the Hertsprung-Russell (H-R) diagram to illustrate the stellar life cycle, create a flowchart of the evolution of stars, and use nebular theory to explain the origin and structure of the solar system.

Outcome S.ES:2 Introduction to Earth Science and Earth's Characteristics and Interior: Students will support theories that explain the formation of Earth and its interior using evidence derived from observations, technology, and mathematical calculations.

Outcome S.ES:4 Plate Tectonics: Students will support the theory of plate tectonics using evidence from continental drift and seafloor spreading, and relate plate movements to convection in the mantle. Students will differentiate the types of plate boundaries based on features and sub-surface stresses associated with those boundaries, and will construct a 3-D model of a plate boundary.

Weeks 10-18

Outcome S.ES:5 Products of Tectonics: Faults, Earthquakes, Volcanism, and Mountain-Building: Students will utilize seismograms and travel-time graphs to triangulate the locations of earthquakes on a map. Students will analyze earthquake and volcano data to determine the locations of Earth's tectonic plates and the boundaries between them. Students will predict volcano type, eruption style and materials, and mountain type at given plate boundaries.

Outcome S.ES:8 Weathering and Soil Formation: Students will differentiate and provide examples of the agents of weathering, and demonstrate how various factors affect the rate of weathering. Students will describe the contents of the three horizons found in most mature soils, compare and contrast the three common types of soil, and relate soil erosion to human activities.

Outcome S.ES:9 Erosion and Deposition: Students will differentiate erosion and weathering. Students will classify, compare and contrast, describe, diagram, differentiate, and identify the agents of erosion and deposition and their effects on Earth's surface and sub-surface. Students will further identify factors that affect those agents, including triggers, gradient changes, and bedrock composition.

Weeks 19-27

Outcome S.ES:6 Minerals and Rocks: Students will describe the processes that result in mineral formation and use the rock cycle to describe the formation of igneous, sedimentary, and metamorphic rocks. Students will identify and classify minerals and rocks based on their characteristics and properties.

Outcome S.ES:7 Geologic Time and Earth's History: Students will provide examples of how uniformitarianism explains Earth's features. Students will employ geologic principles to determine the sequence of events in diagrams of rock layers and use half-life rates to calculate the ages of rocks and fossils. Students will create slide presentations to teach their classmates about a particular period in Earth's history and evaluate each other's presentations.

Weeks 28-36

Outcome S.ES:11 Meteorology—The Atmosphere: Students will diagram the thermal structure of the atmosphere; interpret a heat budget diagram; describe the factors that control temperature; examine the role water plays in atmospheric processes by calculating relative humidity, explaining the processes that produce clouds, and identifying what controls the type of precipitation that reaches Earth's surface; define the factors that control wind; illustrate how winds blow in pressure centers; illustrate global circulation patterns; and compare and contrast weather patterns characteristic of El Nino and La Nina events.

Outcome S.ES:12 Meteorology—Weather and Climate: Students will describe the air masses that influence the weather in North America, describe the weather patterns associated with types of fronts, differentiate the storms that result from the interactions between air masses, compare and contrast the five principal climate groups, analyze global climate change to distinguish natural causes from human- related causes, and hypothesize some of the consequences of global warming.

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