



Earth Systems Syllabus 2015-2016



Mr. Petrie; Petriej@fultonschools.org

Course Description:

Earth Systems is a year-long course designed to continue investigations that began in K-8 Earth Science and Life Sciences. Students will discover the interconnectedness of Earth's cyclic systems and realized history. These systems include the atmosphere, hydrosphere, geosphere, and biosphere which interact over time to produce Earth's landscapes, ecology, and resources. This course will emphasize and develop critical thinking and decision-making skills needed to analyze the complex issues concerning the challenges facing our environment. For specific content and characteristics of science objectives, please refer to the GPS website at: <https://www.georgiastandards.org/standards/Georgia%20Performance%20Standards/EnvironmentalScienceStandards-Approved2006.pdf>. For science literacy standards, please refer to: https://www.georgiastandards.org/Common-Core/Documents/CCGPS_11-12_SS-Science-Tech-Literacy_Standards.pdf

Course Objectives

UNIT	UNIT Title	Standards/Topics/Content	Corresponding Chapters in text	Approximate Time
1	The Origin of Earth as a System.	SES1a, b, d. Formation and composition of Earth as compared to other solar system objects. Initial Oceans and atmosphere. SES4a-e. How fossils and rocks are used to reconstruct Earth's past. SES5f. Relate global climate to Earth/sun relationships. SES6d. How life responds to and shapes Earth's systems.	Chapter 1.1-1.5; Chapter 12.1-12.4; Chapter 22.1-22.3	5 weeks
2	Earth's Atmosphere: Weather and Climate	SES1e. Identify major reservoirs that make up the water cycle SES5a-e. The interaction of insolation and Earth's system to produce weather and climate	Chapter 17,19,20 21 (Ch18- Storm Project)	8 weeks
3	Sculpting Earth's Surface	SES3a-d. The actions of water, wind, ice and gravity to create landforms and landscapes.	Chapter 5,6	4 weeks
4	Oceanography	SES5f. Changes in global climate in relation to natural and anthropogenic modifications SES6a,b,e. The nature and distribution of life	Chapters 14-16**(15)	2 weeks
5	Earth's Materials	SES1c; e. Identify major reservoirs that make up the rock cycle. Radioactive isotopes to determine the age of rocks. SES2d. Plate tectonics settings help identify minerals and rock types SES3e. Terrestrial and marine sedimentary basins SES6c. Human activity impact on geological and ecological interactions	Chapters 2,3,4,11a	6 weeks
6	Forces within and geologic hazards	SES1b-c. The composition of the Earth's crust; Mechanism of heat transfer within the Earth SES2a-c;e. Plate tectonic settings related to rock formation and geologic hazards	Chapters 8,9,10,11	7 weeks

Textbook: Earth Science: Prentice Hall by Tarbuck and Lutgens 2009. **Replacement Cost: \$71.00**

Required Supplies: Textbook daily (assigned to student), composition book, 3 ring binder with 5 dividers, notebook paper, pencils, pens, *glue sticks*, box of colored pencils or markers, highlighter and scientific calculator.

CLASSROOM RULES:

1. Obey all school rules.
2. Be polite and respectful. **Listen when someone else is talking.** Respect other's property.
3. Be prompt, prepared (with required materials), alert and ready to learn. Follow all class procedures.
4. Unacceptable behavior during a lab or class activity will result in a grade of ZERO for that activity.
5. **No food or drinks** other than bottled water may be consumed in the science classroom without permission.
6. During labs, no bottled water or food is allowed at all.



CLASSROOM PROCEDURES:

1. Student Responsibility: You are expected to be respectful towards your teacher, classmates and the property of others. Correction of student misconduct will be according to Northview High School and Fulton County policies.

2. Grading Procedure:

Tests/Projects: 40% Labs: 20% Quizzes: 10% Formative Assessments (Homework / Classwork): 15% Final Exam: 15%

3. Grading Scale: A= 90 and above B= 80-89 C=70-79 F= 69 and below

4. Tardy Students: Students must be in their seats and ready to begin work when the bell rings.

1st Tardy: Verbal warning

2nd Tardy: Verbal warning and intervention (teacher detention)

3rd Tardy: Office managed referral



5. Leaving the Room: Students must use the time between classes to take care of personal matters. No student may leave the room during the first & last 10 minutes of class. No lining up at the door before the bell rings. A pass is required to leave the room.

6. Student Participation: Students are expected to pay attention and contribute to class discussion, activities and labs. This includes taking notes. Be an active learner. Do not be afraid to ask questions! If you don't understand something, please come in for help.

8. Honor Code Policy: As explained in the student handbook, cheating is defined as "the giving or receiving, in any form, information relating to a gradable experience." Violations of the honor code will result in a zero for the assignment, plus an honor code violation form placed in the student's disciplinary file. Read the handbook carefully to fully understand what constitutes a violation. The Honor Code policy will be strictly enforced. For major assessments, a formal Honor Code statement will be signed.

Upon teacher request, students may be required to email assignments to **turnitin.com**. The website checks the submission for plagiarism, and reports to the teacher that the student's work was not copied from any source.

9. Formative Assessments: Homework and Classwork will be assessed regularly. It may be graded based on accuracy or at times for completion/effort. Classwork is comprised of activities that we do in class but are not labs. **In addition to assigned homework, students are expected to read each chapter in the textbook.**

10. Late Work: All work is due at the beginning of class on the date it is due. Late homework will be accepted for up to 70% credit up until the unit test date. Labs and projects will be accepted late for a penalty of 10% each day, at teacher discretion.

11. Make-up Work: **You are responsible for making up all missed work.** You will have 1 day per excused absence day to make up the work.

Labs, tests and quizzes must be scheduled promptly with the teacher upon return. Pop quizzes do not need to be made-up. **You will have 1 week to make-up any missed labs** unless there are verifiable, extenuating circumstances. Assignments issued prior to the absence, including tests and quizzes scheduled for the day of return, are due upon the student's return. An excused absence makes the student eligible to receive full credit for making up the work missed. Extracurricular activities are not a legitimate excuse for not having time to do make-ups. Failure to make up a test or lab results in a grade of zero. **Make-up work is to be signed in and placed directly into designated binder for grading by the teacher.**

12. Missed Work: It is the student's responsibility to ask the teacher about missed work. **It is your duty to check the location and get the material (notes, homework, handouts) that you missed.** A good idea is to have a "study buddy" to copy notes from and keep you informed or see me before school.

13. Quizzes and Tests: Scheduled Quizzes will be given to assess the level of student's understanding. There will be a test after the completion of every chapter or unit. Lab Performance Assessments and projects will be counted as a test or quiz grade.

14. Notebooks: Notebooks will include the syllabus, handouts, notes, labs, class work, homework, and quizzes/tests. Please save **all** your work to study for your cumulative final exam.

15. Lab Experiments: Responsible lab behavior is expected of all students. Lab equipment is shared among all classes, so you will be responsible for paying for the replacement of any lab equipment that you may break. Splash goggles and closed-toed shoes are required for ALL labs involving chemical use.



16. Help Sessions: Extra help is available before and after school. Please see your teacher to arrange a mutually agreeable time.

17. Fulton County Policy – Provision for Improving Grades

Opportunities designed to allow students to recover from a low or failing cumulative grade will be allowed when all work required to date has been completed and the student has demonstrated a legitimate effort to meet all course requirements including attendance. Students should contact the teacher concerning recovery opportunities. Teachers are expected to establish a reasonable time period for recovery work to be completed during the semester. All recovery work must be directly related to course objectives and must be completed ten school days prior to the end of the semester. Teachers will determine when and how students with extenuating circumstances may improve their grades. See student handbook for further information.

18. Progress Reports: Progress reports will be issued every six weeks. Parents/guardians may access their children's assignments, grades, attendance, and discipline records via **Home Access Center**. Please visit www.northviewhigh.com.

