
HUNTSVILLE HIGH SCHOOL



COURSE DESCRIPTION

Gr. 12 EARTH AND SPACE SCIENCE

Course Code: SES4U

Semester Two: 2013 – 2014

Site : <http://ses4u-smith.wikispaces.com/>

Instructor: R. Smith (ext. 434)

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COURSE OVERVIEW

This course develops students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Students will closely examine the materials of Earth, its internal and surficial processes, and its geological history, and will learn how Earth's systems interact and how they have changed over time. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. The course draws on biology, chemistry, physics, and mathematics in its consideration of geological and astronomical processes that can be observed directly or inferred from other evidence.

Course Big Ideas

Astronomy (Science of the Universe)

- ✓ The development of more sophisticated technologies has enabled us to achieve a deeper, more thorough understanding of the origin and evolution of the universe.
- ✓ To investigate and analyse the properties of the universe, particularly the evolution and properties of stars, in both qualitative and quantitative terms;

Planetary Science (Science of the Solar System)

- ✓ Interactions among bodies within the solar system have an impact on the existence of life
- ✓ To develop an understanding of the internal (geological) processes and external (cosmic) influences operating on bodies in the solar system.

Recording Earth's Geological History

- ✓ Earth is very old, and its atmosphere, hydrosphere, and lithosphere have undergone many changes over time.
- ✓ Changing conditions on Earth over time have had positive and negative effects on life on the planet.

Geological Processes

- ✓ Earth's lithosphere is constantly changing as the result of natural phenomena and human activity.
- ✓ Specialized technologies have enabled us to increase our knowledge and understanding of Earth's structure and have improved the ability of scientists to monitor and predict changes in the lithosphere

Earth Materials

- ✓ Different types of rocks have different origins, properties, characteristics, and uses.

COURSE TOPICS:

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|--------|--------------------------------------------------------|
| Unit 1 | <i>Astronomy (Science of the Universe)</i> |
| Unit 2 | <i>Planetary Science (Science of the Solar System)</i> |
| Unit 3 | <i>Recording Earth's Geological History</i> |
| Unit 4 | <i>Geological Processes</i> |
| Unit 5 | <i>Earth Materials</i> |
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STUDENT EVALUATION

Knowledge and Understanding	25%
Thinking and Investigations	15%
Application	20%
Communication	10%
Culminating (Exam 30%)	30%
Total	100%

PLAGIARISM

Using other people's ideas or words in your work is not permitted, unless you acknowledge them properly (See the H.H.S style guide). The penalty for plagiarism is severe- a Zero. This applies to all assignments in all courses.

Requirements:

- Supplies:** Standard 3-ring binder with lined paper, pen, red pen, pencil, ruler and calculator.
- Attendance:** Success depends on regular attendance. A parent must notify the school by 2:00 pm on the day of the absence or a truant will be recorded.
- Punctuality:** Lateness is to be avoided since it interferes with your success and disrupts the class. . If you are late, you must get an admit slip from the office. If you are late please knock ONCE and wait to be admitted. I will get to you when I have time.
- Tests:** If you know you are going to miss a test you must notify the teacher before test day. If you are absent for a test you may write the make-up test **DURING YOUR LUNCH PERIOD the next day you attend school**, and only if a parent calls the attendance office or you deliver a note from home to the attendance office. If you are eighteen and have signing privileges, either **you** must phone and leave a message on the attendance office voicemail before 2:00 p.m. the day of your absence or you must discuss your absence with a Vice-Principal. You will be required to write the test during lunch time in study hall.
- Labs & Assignments:**
All students are expected to perform and report all required labs and to submit all assignments. Missed labs must be made up during study hall. Labs should be written up individually and according to the outline discussed.
- Late Penalties:** Late submission of any summative task (assignment, lab, etc.) will be subject to the penalties stated in the school policy. Students will be expected to use study hall during lunch time to make up all late assignments. Students must negotiate an extension **prior to the due date**. *Extension requests* must be in **written form**.
- Technology:** Within this class students may use their personal devices ONLY for productive and class-related uses. If students are using phones/devices for non-productive or non-class related activities the HHS cell phone/device policy will be enacted and the device will be taken away.
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STUDENT SIGNATURE: _____

PARENT/GUARDIAN SIGNATURE: _____

