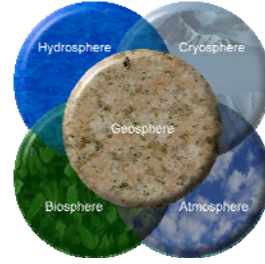




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Mission To Planet Earth Systems



Earth System Science is an interdisciplinary field that describes the cycling of energy and matter between the different interacting spheres (atmosphere, hydrosphere, biosphere, cryosphere, and geosphere) of the Earth system.

The scientific process involves observations, interpretation, model building and prediction. To facilitate the understanding of subject material, we will be incorporating web-based media, peer instruction methods, audience participation, in-class demonstrations, interactive laboratories, developing mission systems, building a learning community, and a field trip or two. This class is a study of earth system science from an *engineering AND science* point of view. The course also involves brief looks into chemistry, math, and physics. There are no prerequisites other than algebra, some familiarity with the periodic table, diligence, and an inquisitive nature.

Class Expectations

To give yourself the best chance of learning effectively it is expected that you:

- Attend all class sessions and be punctual.
- Keep up to date with the readings and other assigned work.
- Participate in class – discuss, ask questions, contribute to your group.
- Maintain the highest academic integrity.
- Bring a calculator and your folder to class.

Units of Work

1. Earth systems science
2. The universe and Earth’s place in it
3. A study of Earth’s surface and its interior
4. Oceanography and water on Earth
5. The study of our atmosphere, weather and climate
6. Renewable energy
7. Mission to planet Earth

Grading

Grading will be based on work carried out in and out of class hours – lectures, laboratories, assignments, quizzes, mission systems projects, student presentations, group work, field trips etc. Grading guidelines are shown below.

- Unit Work 60%
- Reading/Writing/Reaction papers, Quizzes, Assignments, Laboratories etc.
 - Mission Systems Proposal, Mission System, Report, Presentation
- Semester Finals 20%

Mission to Planet Earth Systems 20%

Percentage	Letter Grade
90+	A
80+	B
70+	C
60+	D
60–	F

Textbook

Either Tarbuck & Lutgens, Earth Science (11th Edition, Prentice Hall)
 Or Hess, Earth Science: Geology, the Environment, and the Universe (Glencoe)

