

## PHSC 4013 Earth Science

**INSTRUCTOR:** Mr. Brian M. Cudnik, Physics Laboratory Specialist  
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**OFFICE HOURS:** Tuesdays 11:00am to 2:00pm  
**TEXTBOOK:** *Earth Science, Eleventh Edition.* Tarbuck and Lutgens  
**PREREQUISITES:** PHSC 2103 or PHYS 2123 or PHYS 2523

**COURSE GOALS:** This course is designed for science teachers in junior and senior high schools. It covers basic concepts of earth science and methods of teaching. The content covers a study of geology, meteorology, oceanography, environmental science, and astronomy. A study analysis and evaluation of some of the recent systems and techniques in the teaching of earth science will be performed as time allows. Elements from the Online Weather Studies and the Online Ocean Studies courses are included.

**LEARNING OBJECTIVES:** The student should be able to gain an understanding of the Earth System as a whole as well as the various components of the System in and of themselves. We also discuss how the systems work together to produce what we observe in nature. Critical thinking skills are discussed and practiced as well as some useful techniques in teaching Earth Science in the secondary school setting.

**COURSE POLICIES:** This course will use a variety of formats, including lecture, discussion, and in-class projects. Reading will constitute the bulk of the homework assignments; it is very important that you read the entire assigned material before class, as the topic of the day will touch upon key topics within the material. Although many of the lectures are based on the topics in the text, the overlap between reading and in-class will likely be rather small...thus it is very important that you attend all the classes. There will be in-class exercises as well as online homework assignments. Access to a computer with Internet will be vital for success. There will be two exams (a midterm and a final) and 12 assignments out of the book. There will also be 8 to 10 short investigations from the Online Weather Studies and Ocean Studies websites (mostly from the latter, and I will give you the login information when you need it)..

**HOMEWORK AND GRADING:** Makeup exams and in class activities will be given only for university-approved absences verified in writing. Homework is to be turned in on time; no late homework will be accepted. As mentioned in the previous section, there will be a variety of elements used in determining the final grade for this course. The breakdown is as follows:

- Exams (two midterms and one final), 100 pts each.
- Homework assignments (20), 10 points each.
- Reading assignments will be given weekly; it is important to keep up with them, as they will help to enhance the in class experience as well as your experience on the exams.

The grading system is as follows:

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

**ATTENDANCE POLICY:** Class will meet from 3:00 until 5:50pm every Tuesday starting August 26<sup>th</sup>. The meeting will be in room A104 of the O'Banion (New) Science Building. Attendance at every class is expected and is each student's responsibility-it is also imperative that you be on time as much as it is possible. Absence or tardiness, accumulated from day 1, may result in lowered grades; excessive absenteeism, whether EXCUSED or UNEXCUSED, may result in a student's course grade being reduced or assignment of a grade of "F". In contrast, attendance points may help you get the next highest grade. You can find more details in the University Undergraduate Catalog (2005 – 2007, p.111).

**STUDENT ACADEMIC APPEALS PROCESS:** (Refer to the University Undergraduate Catalog, 2005 –2007, pp. 106-108)