PHSC 4013 Earth Science
Department of Physics, Brailsford College of Arts and Sciences

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OFFICE HOURS: Tues. and Thurs. 1pm – 3pm
VIRTUAL OFFICE HOURS (WHEN I CHECK E-MAIL):
Mon. thru Fri. 9am – 11am, 1pm – 3pm
COURSE LOCATION: E. E. O’Banion Science Building, Room A104
CLASS MEETING DAYS AND TIMES: Tues. and Thurs. 3:30pm – 4:50pm
PREREQUISITES: PHSC 2103 or PHYS 2123 or PHYS 2523
ACCESS TO LEARNING RESOURCES:
PVAMU Library:
phone: (936) 261-1500;
web: http://www.tamu.edu/pvamu/library/
University Bookstore:
phone: (936) 261-1990;
web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d

COURSE GOALS AND OVERVIEW: 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. This course incorporates elements from the Online Weather Studies material.

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, student presentations, and in-class exercises. Reading will constitute a good part 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 8 in-class exercises, 5 short investigations from the Online Weather Studies website (I will give you the login information when you need it), and 10 assignments out of the book. There will also be two exams (one midterm and one final)

**COURSE EVALUATION METHODS:**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course:

- **Exams** – written tests designed to measure knowledge of presented course material, 100 pts for midterm and 150 pts for final. In addition, there will be two in-class quizzes at 20 pts each
- **Exercises** – written assignments designed to supplement and reinforce course material, 10 pts each
- **Projects** – assignments designed to measure ability to apply presented course material. This will take the form of in-class presentations, 15 pts each, and critical thinking exercises, 10 pts each
- **Class Participation** – daily attendance and participation in class discussions, 35 pts

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<thead>
<tr>
<th>Instrument</th>
<th>Value (points &amp; percentages)</th>
<th>Total</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>15 assignments at 10 points each (25% course grade)</td>
<td>150</td>
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<tr>
<td>Critical Thinking Exercises</td>
<td>8 assignments at 10 points each (13.3% course grade)</td>
<td>80</td>
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<tr>
<td>In-class Oral Presentations</td>
<td>3 exercises at 15 points each (7.5% course grade)</td>
<td>45</td>
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<tr>
<td>Quizzes</td>
<td>2 quizzes at 20 points each (6.7% course grade)</td>
<td>40</td>
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<tr>
<td>Mid Term Exam</td>
<td>100 points (16.7% course grade)</td>
<td>100</td>
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<tr>
<td>Class Participation/ Discussion</td>
<td>35 points (5.8% of course grade)</td>
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<tr>
<td>Final Exam</td>
<td>150 points (25% of course grade)</td>
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<td><strong>Total:</strong></td>
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<td><strong>600</strong></td>
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Makeup exams, makeup quizzes 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 unless circumstances warrant. As mentioned above, there will be a variety of elements used in determining the final grade for this course. Reading assignments will be given regularly; 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% (540 to 600 points)
- B 80 – 89% (380 to 539 points)
- C 70 – 79% (320 to 379 points)
- D 60 – 69% (260 to 319 points)
- F 0 – 59% (0 to 259 points)

**UNIVERSITY RULES AND PROCEDURES:**
Disability statement (See Student Handbook):
Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):
You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:
1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else’s words, ideas, or data as one’s own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one’s own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)
The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor’s ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook):
Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy:
Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of “F”. Absences are accumulated beginning with the first day of class. It is also imperative that you be on time as much as it is possible. You can find more details in the University Undergraduate Catalog (2005 – 2007, p.111).

Student Academic Appeals Process
Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.