

# PRAIRIE VIEW A&M UNIVERSITY DEPARTMENT OF PHYSICS

PHSC-1123-P06: PHYSICAL SCIENCE

**CRN 20503** 

**COURSE SYLLABUS, SPRING 2012** 

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**Lecture Sessions:** MWF, 1:00 – 1:50 AM, Room NSCI-A103

**Office Hours:** MWF 12:00 – 12:50 PM

Text Book: Physical Science, 8<sup>th</sup> ed.,

By Bill Tillery,

ISBN 978-0-07-304992-2 (McGraw Hill)

Website: https://www.pvamu.edu/pages/2812.asp

# **COURSE DESCRIPTION:**

A course designed for survey and introduction of basic principles of physical science and physical processes in our environment, with focus on current discoveries in geology, astronomy and meteorology. Topics such as solar system and other systems in the universe, sunspots, life and death of stars, galaxies including the Milky Way Galaxy, pulsars and quasars will be studied.

# **Co-REQUISITE**:

PHSC 1121

### **Course Goals or Overview:**

This course is designed to introduce students to the basic principles of physical science and physical processes in our environment. The following branches of physical science will be emphasized: Geology, Astronomy, and Meteorology.

### **COURSE OUTCOMES:**

- 1. Students will learn different professions of geology.
- 2. Students will learn how earthquakes occur and why they generally occur in specific locations of the Earth.
- 1. Students will learn why the lithospheric plates move.
- 2. Students will locate seismic belts of the world.
- 3. Students will learn the methods for determining the ages of events that occurred during geologic time.
- 4. Students will learn the components of our solar system and the universe.
- 5. Students will compare our solar system with other solar systems in the universe.
- 6. Students will learn different minerals and rocks and why mountains are not located at random on the surface of the Earth.
- 7. Students will learn how stars are formed and classified.
- 8. Students will learn why planets always stay in their orbits and why only one side of the Moon faces us all the time.
- 9. Students will learn the Earth's atmosphere and weather.
- 10. Students will be able to categorize hurricanes.

# **COURSE EVALUATION METHODS:**

This course will use the following instruments to determine student grades. Exams are scheduled after each chapter. The remaining points of your final grade will come from written papers, your project and a final.

## PERFORMANCE EVALUATION and GRADING:

- This course uses the lecture format. Selected materials in each chapter will be covered in lecture. You should read the entire assigned chapter & work some of the problems before class. The lecture will not replace reading the materials but to amplify and explain the materials in the textbook.
- It is expected that you will need to spend at least two hours studying outside the class for each hour spent in class. This means you should plan to devote a minimum of nine hours per week for this class.
- Lectures: Attendance of lectures is required, and students are expected be arrive on time, stay for the entire class period, and actively participate. (See the University attendance policy below.) The lecture does not replace reading the materials. The lecture is intended to expand, explain, and offer a different perspective on the material in the textbook.
- Exams: Unit exams and a final exam are scheduled. Examinations will consist of qualitative problems. All examinations are closed book and the Final is comprehensive. Only calculators and no other electronic equipment are permitted during the exams. Phones are to be turned off.
- **Homework:** Homework will be assigned in the form of written papers which are to be turned in electronically and on time **NO Exceptions!** It is the responsibility of the student, individually using MLA format to complete each homework assignment by the due date. The instructor is available during office hours to assist students, and tutors are provided by the Physics Department. It is essential that the student <u>understands</u> the

- solution to problems if he/she is to succeed in this course; failure to understand homework problems will likely result in a disastrous outcome on exams.
- **Grading:** The project and paper each contribute 15%; the unit exams contribute 50%, and the final exam contributes 20% toward the final numerical grade. *Scores will not be curved.* A cumulative performance of 60% is required for a "D", 70% for a "C", 80% for a "B", and 90% for an "A" as the final grade in the course.
- Late Homework or Missed Exams: Late homework will not be accepted unless the student demonstrates exceptional circumstances. A unit exam may be excused or made-up at the instructor's discretion and only in the case that the student has a valid excuse. Inform the instructor in advance of an exam if there is a valid schedule conflict to schedule an acceptable time. ALL make-ups must be done within 1 week of the original exam date. If one missed exam overlaps with a second exam, the first cannot be made up. In the event that an emergency occurs that causes an exam to be missed, it is expected that the student provide written evidence and schedule a make-up exam for as soon as possible following the emergency. There are no opportunities to take the final exam before or after the scheduled time.

### **GRADE DETERMINATION**

Assignment	Percent	Grade	Scale (%)
Exams	50	A	90 – 100
Final	20	В	80 – 89.99
Paper	15	С	70 – 79.99
Project	15	D	60 – 69.99
		F	Below 60
Total	100 points		

# **GRADE OF "I":**

A grade of "I" may be given in cases of documented emergencies or tragedies that prohibit a student from completing a course. In order to receive a grade of "I", approval must be granted by the Department Head and College Dean prior to the final examination time.

# **CLASS SCHEDULE**

(Schedule Subject to Change)

Week	<u>Topic</u>	<u>Note</u>
1 (Jan 17 – Jan 20)	Ch. 14 The Universe	Late Registration & Drop/Add Ends on Jan 21 for Undergrad. & on Jan 21 for Graduate Students
2 (Jan 23 – 27)	Ch. 14 The Universe Continued	Jan 26: General Student Assembly
3 (Jan 30 – Feb 3)	Ch. 15 The Solar System	Feb 1: Last day to withdraw from course without academic record
4 (Feb 6 – 10)	Ch. 15 The Solar System Continued	
5 (Feb 13 – 17)	Ch. 16 Earth in Space	
6 (Feb 20 – 24)	Ch. 17 Rocks and Minerals	
7 (Feb 27 – Mar 2)	Ch. 17 Rocks and Minerals Continued	
8 (Mar 5- 9)	Ch. 18 Plate Tectonics	Mid-Term Exam
9 (Mar 12 – 16)	Ch. 19 Building Earth's Surface	
10 (Mar 19 – 23)	Ch. 20 Shaping Earth's Surface	Mar 23: Deadline to apply for Summer and Fall 2012 graduation
11 (Mar 26 – Mar 30)	Ch. 21 Geologic Time	Mar 28: Honors Convocation
12 (Apr 2 – 6)	Ch. 22 The Atmosphere of Earth	Apr 2: Last day to withdraw from course with "W" Apr 6: Good Friday, No Classes
13 (Apr 9 – 13)	Ch. 23 Weather and Climate	
14 (Apr 16 – 20)	Ch. 24 Earth's Waters	
15 (Apr 23 – 27)	Project Presentations	
15 (Apr 30 – May 3)	MT Review Days; WR – Study Days	End of Course

# **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) at (936) 857-2693/2694 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.

## **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.