

PHSC 2123 Physical Science II

Spring Semester, 2007

Professor	Dr. Cleo L. Bentley, Jr	Office Hours	MW 1-4, T12:30-2,Th 1-4
Office	Rm 330AB NSB	e-mail	clbentley@pvamu.edu
Phone	936-261-3138, 3140	Web address	
		Time	Sect. 1 MWF 12-1 Rm 307 NSB

CATALOG DESCRIPTION Credit 3 semester hours. Emphasizes insight into basic physical science principles and practices with a balanced exposure to inorganic & organic chemistry, and physics.

CO-REQUISITE: PHSC 1121. *(PHYS 1315)

COREQUISITES BY TOPIC:

Physical science lab.

TEXTBOOK: Physical Science 7th Ed. by Bill W. Tillery

REFERENCE: Contemporary Physical Science by Aluka., the Physical Universe by Krauskopf & Beiser.

COURSE GOALS:

The purpose of this course is to give the student a broad-based introduction to chemistry and physics with a secondary emphasis on exposure to quantitative measurement and error analysis, and plotting and displaying data using MS Word, Excel and PowerPoint.

Course Outcomes :

Upon completing this course the student will have exposure to and basic knowledge of many concepts in chemistry and physics, as well as experience in solving word problems associated with standard concepts, and exposure to selected quantitative measurement, error analysis and data plotting. Computer assignments will give the student exposure to MS Word, Excel and possibly PowerPoint.

Course Policies:

This course uses the lecture format. Reading and homework assignments will be made typically from the textbook web site, and some problems will be graded. Occasional quizzes (expected everyday) will check the reading assignments. It is expected that you will need to spend at least two hours studying outside the class for each hour spent in class. That means you should plan to devote a minimum of nine hours per week for this class.

Homework And Grading

1)

- a. Your grade will be based on class participation in the the form of explaining problems, answering questions from the instructor, and taking quizzes (extra points to buffer your exam scores--you get paid for everything that you do), turning in computer assignments using MS WORD, EXCEL, POWERPOINT and/or the textbook web site, turning in notes (< 50 pts.), three major exams (covering about 6 current chapters each), and a comprehensive final exam.
- b. Attendance should be maintained. Particularly, there is no way to make-up a quiz or lab missed, but if you miss a quiz, two points are taken.
- c. Remember: 'To hear is to forget, to see is to know, to do is to understand'.
- d. Your final grade will be based on your overall average falling in the following categories: A--from 90 to 100; B--from 70 to 89; C--from 50 to 69; D--from 30 to 49; F-under

100—90	A
89—70	B
69—50	C
49—30	D
29—0	F

- 2) Material in each reading assignment will be covered in the lecture on the date given. You should read the entire assignment and if possible work some of the problems before the class.
- 3) Problem assignments and quizzes that are missed will not be made up.

Oral and Written Communications

Oral or Written communication assignments are given through exams, quizzes, answering questions in class, board explanations, and report writing.

Attendance Policy: (undergraduate catalog, 1998-2001, pp.80

Classes will start at the prescribed time and will end at the prescribed time. Excessive absences or tardiness 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. University Undergraduate catalog (1998-2001, pp.80) provide more detail information.

Student Academic Appeals Process (undergraduate catalog, 1998-2001, pp.88-91)

ADA statement

COURSE OUTLINE

Week	Topic	Note
	Introduction	
1 - 8	<p style="text-align: center;">COURSE CONTENT</p> <p>This course is the second of a two semester course in physical science. The objective of the course is to enhance the students broad exposure to the physical sciences. It is desirable that the learning environment be a microcosm of the professional world--that is, the system of evaluation is to reflect the effort, as well as cleverness, that is produced by the student. Each student is "paid" extra points for class participation outside the two major exams, one comprehensive exam, and 50 points for complete notes. A list of what this course will cover and the tentative timetable is found below.</p> <p style="text-align: center;">FIRST 9 WEEKS</p> <p>Chapters 7-12--Atomic structure, periodic table, chemical bonding, compounds, naming, Bohr sketch, chemical reactions, water and solutions, pH, nuclear reactions, organic compounds, alkanes, alkenes, alkynes, alcohols, halides, ethers, etc. Review. First major exam.</p>	
9-16	<p style="text-align: center;">SECOND 9 WEEKS</p> <p>Physics chapters 1-6 Measurement, data analysis, conversions, motion, force, work, energy, roller coaster problems, torque, Newton's universal law of gravitation, Hohmann's orbital transfers, Review, Second exam. Temperature, waves, light, electricity and magnetism, relativity. Review. Third (Final) exam.</p>	
17	Review	Final Exam