



Peru State College
ESCI 206-000A – PRINCIPLES OF PHYSICAL SCIENCE
Syllabus – Fall – 2011

Instructor: Dr. Daryl Long

Office Hours: MW: 7:15-7:45 am and 1:30-3:15 pm; TR: 7:15-9:15am and 1:45-2:30pm Other times by Appointment

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Course Meets: MW / 8 am – 9:15 am / Hoyt 105

**Required Textbook: Title: The Physical Universe
Author: Krauskopf & Beiser
Publisher: McGraw - Hill
Edition: 11th edition**

Course Description & Objectives

An integrated course specifically designed for the non-science student covering the various phases of man's physical and chemical world. Experiences in a variety of learning situations, such as demonstrations, experiments, instructional television and other visual aids. Does not apply on the major of support in physical science.

Objectives:

- A. To develop an appreciation of physical science
- B. To understand Newton's Laws
- C. To know and use the concept of energy and work
- D. To understand the concept of light, electricity and magnetism
- E. To understand basic chemistry – (atomic structure, periodic law)
- F. To know about the earth – (continental drift, glacial & loess deposits, soils in Nebraska)
- G. To understand weather concepts

Prerequisites:

Non-science students

Upon completion of this course you should be able to:

1. To use Newton' Laws to make predictions about motion
2. To have some understanding of the physical sciences
3. To have a working relation of energy and work
4. To understand part of the atomic world i.e. Chemistry
5. To distinguish between loess and glacial till and appreciate the diversity of soils
6. To appreciate the fundamentals of weather.

At the beginning of the course, we will discuss how these objectives fit into the College's and School's mission and goals. The instructor reserves the right to modify any aspect of the course syllabus or content. Any modifications will be communicated to students in advance.

Instruction Method/Mode of Delivery:

- A. Most classes are lecture and discussion
- B. A field trip to look at loess, glacial deposits and soils is taken
- C. VCR videos

Student Requirements:

Assessment Method:

- 5 % Daily Work
- 5 % Study Sheets
- 90% Tests

Grading Policy:

- A = 90-100%
- B+ = 85-89%
- B = 80-84%
- C+ = 75-79%
- C = 70-74%
- D+ = 65-69%
- D = 60-64%
- F=<60%

Attendance Policy:

Students are expected to attend class regularly, to arrive punctually, and to complete all assigned work. Attendance is a privilege and a responsibility represented by not only the student's investment, but also by a significant investment by the State of Nebraska.

College's Incomplete Coursework Policy

To designate a student's work in a course as incomplete at the end of a term, the instructor records the incomplete grade (I). Students may receive this grade only when serious illness, hardship, death in the immediate family, or military service during the semester in which they are registered prevents them from completing course

requirements. In addition, to receive an incomplete, a student must have completed substantially all of the course's major requirements.

Unless extenuating circumstances dictate otherwise, students must initiate requests for an incomplete by filling out an Incomplete Grade Completion Contract, which requires the signature of the student, instructor, and Dean. The Incomplete Grade Completion contract cites the reason(s) for the incomplete and details the specific obligations the student must meet to change the incomplete to a letter grade. The date by which the student agrees to complete required work must appear in the contract. The Dean, the instructor, and the student receive signed copies of the Incomplete Grade Completion Contract.

Even if the student does not attend Peru State College, all incomplete course work must be finished by the end of the subsequent semester. Unless the appropriate Dean approves an extension and if the student does not fulfill contract obligations in the allotted time, the incomplete grade automatically becomes an F.

College's Academic Integrity Policy

The College expects all students to conduct themselves in a manner that supports an honest assessment of student learning outcomes and the assignment of grades that appropriately reflect student performance. It is ultimately the student's responsibility to understand and comply with instructions regarding the completion of assignments, exams, and other academic activities. At a minimum, students should assume that at each assessment opportunity they are expected to do their own original academic work and/or clearly acknowledge in an appropriate fashion the intellectual work of others, when such contributions are allowed. Students helping others to circumvent honest assessments of learning outcomes, or who fail to report instances of academic dishonesty, are also subject to the sanctions defined in this policy.

Instances of academic dishonesty may be discovered in a variety of ways. Faculty members who assign written work ordinarily check citations for accuracy, run data base and online checks, and/or may simply recognize familiar passages that are not cited. They may observe students in the act of cheating or may become aware of instances of cheating from the statements of others. All persons who observe or otherwise know about instances of cheating are expected to report such instances to the proper instructor or Dean.

In order to promote academic integrity, the College subscribes to an electronic service to review papers for the appropriate citations and originality. Key elements of submitted papers are stored electronically in a limited access database and thus become a permanent part of the material to which future submissions are compared. Submission of an application and continued enrollment signifies your permission for this use of your written work.

NSCS Board of Trustees Policy 4220 states that each College “. . . will establish a distance learning assessment policy that will include, at a minimum, a substantial culminating experience that is proctored.” Peru State College’s policy is that each course that is offered entirely online will feature a proctored final exam that substantially measures the extent the course’s stated learning objectives are achieved. Online course syllabi will clearly state that, regardless of grades earned previously, the proctored final exam must be passed in order to receive credit for the course. Courses which feature graded site-based activities (e.g., teaching demonstrations) and/or video-taped presentations that occur near the end of the term, and that are designed to substantially assess the achievement of learning objectives, can be considered in compliance with this policy. Project-based capstone and graduate courses utilizing real-time discussions held by web-cam, phone or in person with the faculty member as part of the assessment process can also be considered in compliance with this policy.

Should an occurrence of academic misconduct occur, the faculty member may assign a failing grade for the assignment or a failing grade for the course. Each incident of academic misconduct should be reported to the Dean and the Vice President for Academic Affairs (VPAA). The VPAA may suspend students for two semesters found to be responsible for multiple instances of academic dishonesty. The reason for the suspension will be noted on the student’s transcript.

A faculty member need present only basic evidence of academic dishonesty. There is no requirement for proof of intent. Students are responsible for understanding these tenets of academic honesty and integrity. Students may appeal penalties for academic dishonesty using the process established for grades appeals.

Title IX Compliance Notice

Peru State College is an equal opportunity institution. PSC does not discriminate against any student, employee or applicant on the basis of race, color, national origin, sex, disability, religion, or age in employment and education opportunities, including but not limited to admission decisions. The College has designated an individual to coordinate the College’s nondiscrimination efforts to comply with regulations implementing Title VI, VII, IX, and Section 504. Inquiries regarding non-discrimination policies and practices may be directed to Eulanda Cade, Director of Human Resources, Title VI, VII, IX Compliance Coordinator, Peru State College, PO Box 10, Peru, NE 68421-0010, (402) 872-2230.

Students requesting reasonable accommodation and tutoring services should contact the Center for Achievement and Transition Services (CATS).

Tentative Course Schedule

Units and Contents:

1. The Scientific Method
2. Motion
3. Energy
4. Matter and Heat
5. Electricity and Magnetism
6. Waves
7. The Nucleus
8. The Atom
9. The Periodic Law
10. Crystals, Ions, and Solutions
11. Chemicals Reactions
12. Organic Chemistry
13. Atmosphere and Hydrosphere
14. The Rock Cycle
15. The Evolving Earth
16. The Solar System
17. The Stars
18. The Universe