

**PRAIRIE VIEW A&M UNIVERSITY
DEPARTMENT OF PHYSICS**

**PHYS-2113-001: GENERAL PHYSICS I
COURSE SYLLABUS
Fall 2007**

Professor: Gary M. Erickson, Ph. D.

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Lecture Sessions: Monday/Wednesday/Friday 11:00 – 11:50 AM
Room: NSCI-122

Office Hours: Monday/Wednesday/Friday 10:00 – 10:50 AM

Text Book: Essentials of College Physics by Serway and Vuille
(Thomson-Brooks/Cole)

COURSE DESCRIPTION:

This is an algebra-based introductory course in general physics with topics primarily from mechanics, such as kinematics in one and two dimensions, Newton's laws of motion, work-energy, uniform circular motion, gravity, rotational kinematics and dynamics, simple harmonic motion, and mechanical waves.

COURSE OBJECTIVES:

The objectives of this course are for students to develop a conceptual understanding of physics principles along with their reasoning and problem solving abilities.

PERFORMANCE EVALUATIONS and GRADING:

- **Lectures:** Attendance of lectures is expected, and students are encouraged to actively participate. (See the University attendance policy below.)
- **Homework:** Homework problems will be assigned from time to time. It is the responsibility of the student, individually or within a group, to complete each homework assignment by the due date. It is essential that the student understand the assigned problems if he/she is to succeed in this course; failure to understand homework problems will likely result in a disastrous outcome on exams.
- **Quizzes and Exams:** Four exams and a final exam are planned. Exams will last the class period and be graded on a 100-point scale. Each exam will cover the class material since the previous exam. The final exam will be comprehensive and graded on a 200-point scale. Anticipate a quiz at the beginning of each class (due 5 minutes after the scheduled start of class) based on previous lectures or the current reading assignment.
- **Grading:** Attendance, class participation, and quizzes will count like one exam. Homeworks will count like one exam. This course will be challenging, and a cumulative performance of 35% is required for a “D”, 50% for a “C”, 65% for a “B”, and 80% for an “A” as the final grade in the course.
- **Late Homework or Missed Exams:** Late homework will be penalized at the rate of 15% per calendar day. This penalty may be waived only for a valid emergency. An exam may be excused or made-up at the instructor’s discretion and only in the case that the student has a valid excuse. Please, inform the instructor in advance of an exam if there is a valid schedule conflict. In the event that an emergency occurs that causes an exam to be missed, it is expected that the student provide written evidence and make up exam for as soon as possible following the emergency (usually before the end of the next class following the exam).

Tutoring:

Tutors are available at the Coleman Library and in Room 324 in the Physics Department.

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 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.

ADA STATEMENT:

Students with disabilities who believe they may need an adjustment in this class are encouraged to contact the Office of Disabilities Services at (936) 857-2693/2694 as soon as possible. Once you receive a letter of adjustment from the office, kindly make an appointment with me to discuss appropriate adjustments for this class.

CHEATING AND PLAGIARISM:

Prairie View A&M University is dedicated to a high standard of academic integrity among its faculty and students. In becoming part of the Prairie View A&M academic community, students are responsible for honesty and independent effort. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit.

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.

COURSE SCHEDULE:

This anticipated class schedule follows. This schedule may be modified as needed.

<u>Week of</u>	<u>Monday</u>	<u>Wednesday</u>	<u>Friday</u>
August 20	Units, Dimension, Measurements (Ch. 1)	Assessment	Vectors (Ch. 3)
August 27	Vectors (Ch. 3)	Student Assembly - No Class	Kinematics (Ch. 2-3)
September 3	Labor Day - No Class	Kinematics (Ch. 2-3)	Kinematics (Ch. 2-3)
September 10	Review	Review	Exam 1 (Ch. 1-3)
September 17	Newton's Laws (Ch. 4)	Forces (Ch. 4)	Force Diagrams (Ch. 4)
September 24	Equilibrium (Ch. 4)	Uniform Circular Motion (§7.4)	Gravitation (§7.5-6)
October 1	Review	Review	Exam 2 (Ch. 4, §7.4-6)
October 8	Work and Energy (Ch. 5)	Kinetic Energy (Ch. 5)	Potential Energy (Ch 5)
October 15	Conservation of Energy (Ch. 5)	Power (Ch. 5)	Impulse and Momentum (Ch. 6)
October 22	Collisions (Ch. 6)	Review	Exam 3 (Ch. 5-6)
October 29	Rotational Motion (§7.1-3)	Rotational Kinematics (§7.1-3)	Rigid Bodies, Center of Mass (Ch. 8)
November 5	Torques, Equilibrium (Ch. 8)	Rotational Work and Energy (Ch. 9)	Angular Momentum (Ch. 9)
November 12	Review	Review	Exam 4 (Ch. 7-9)
November 19	Simple Harmonic Motion (Ch. 13)	Waves (Ch. 13)	Thanksgiving - No Class
November 26	Review Day	Study Day	
December 3	Final Exam (Comprehensive) - Mon 12/3, 10:30AM - 12:30PM		

