Reedley College Fall 2010

PHY 2A - General Physics I

SYLLABUS

 Class Hours/
 M W F
 12 p.m. – 12:50 p.m.
 PHY 70 (Lecture)

 Room No
 Th
 12 p.m. – 12:50 p.m.
 SOC 31 (Lecture)

 T
 12 p.m. – 1:50 p.m.
 PHY 70 (Lab)

Class No 57486

Instructor Sharon Wu **Phone** 638-3641 ex-3497

Office Hours M 11 a.m. – 11:50 a.m. Math Center (FEM Building)

Th 2 p.m. - 4 p.m. FEM 1D

or By appointment

Office FEM 1D

E-mail sharon.wu@reedleycollege.edu

Course Objectives:

In the process of completing this course, students will:

- A. Perform some of the simpler calculations in the areas of mechanics, properties of matter, heat, sound and waves.
- B. Use the appropriate language of physics and mathematics to solve problems in physics in the areas of mechanics, properties of matter, heat, sound and waves.
- C. Perform simple physics in the areas of mechanics, properties of matter, heat, sound and waves to acquire understanding of more difficult concepts in general physics.
- D. Understand and apply basic physics concepts presented in lectures to the completion of problem assignments and lab reports.
- E. Employ the scientific method in experiments in physics which yield results consistent with information presented in lectures.

Learning Outcomes:

Upon completion of this course, students will be able to:

- A. Recognize the systematic nature of the discipline of physics in the areas of mechanics, properties of matter, heat, sound and waves and develop new ideas using previously held knowledge as the foundation.
- B. Apply sound reasoning skills, developed through the problem solving process of physics, to responsible decision making.
- C. Apply knowledge in the areas of mechanics, properties of matter, heat, sound and waves in other science related courses.

Course Prerequisite:

Trigonometry (MATH 4A) and eligibility for English 1A.

Textbook:

Title: Physics 8e

Authors: John D. Cutnell & Kenneth W. Johnson

Publisher: John Wiley & Sons, Inc.

Blackboard

Blackboard is used for announcement and general class related information

To log-in Reedley College Blackboard:

User name: your student ID

Password: (* Be sure to change your password after you login)

WileyPLUS

WileyPlus is an online learning and homework assessment system.

URL: http://edugen.wiley.com/edugen/class/cls189207/

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Course Outline:

- 1. Introduction and Mathematical Concepts
- 2. Kinematics in One Dimension
- 3. Kinematics in Two Dimensions
- 4. Forces and Newton's Laws of Motion
- 5. Dynamics of Uniform Circular Motion
- 6. Word and Energy
- 7. Impulse and Momentum
- 8. Rotational Kinematics
- 9. Rotational Dynamics
- 10. Simple Harmonic Motion
- 11. Fluids
- 12. Temperature and Heat
- 13. The Transfer of Heat
- 14. The Ideal Gas Law and Kinetic Theory
- 15. Thermodynamics
- 16. Waves and Sound

Homework Assignments:

Homework is assigned for each chapter on WileyPLUS.

Laboratory:

This class has a lab that is mandatory. There are data sheets that you will need to complete as part of your lab activity that will be due at the end of the lab session. You are required to follow a number of safety precautions in the laboratory. You must read and sign the safety agreement before beginning of the first lab.

Tests:

There will be a test every two chapters and final exam. Each test has conceptual questions that are multiple choices; and detailed physics problems that will need to be solved. Early tests can be arranged with a very good reason. A more **difficult** late test can only be arranged if you have an excuse verified by an impartial party (i.e., a doctor or a court note).

Grading:

30% of the final grade points are from homework assignment 10% of the final grade points are from laboratory work

60% of the final grade points are from chapter tests

Final grade is assigned using following scale:

90-100 % A 80-89 % B 70-79 % C 60-69 % D <60 % F

❖ If you have perfect attendance and your grade is within 1 point (or 1%) of the next higher letter grade, the instructor will award you the next higher letter grade.

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Important Dates:

Class begin	Monday	08/16/2010
Last day to register	Friday	09/03/2010
Last day to change to/from a	Friday	09/17/2010
Pass/No-Pass grading basis		
Last date to drop this class	Friday	10/15/010
No classes (Campus closed)		
Labor Day	Monday	09/06/2010
Veterans Day	Thursday	11/11/2010
Thanksgiving Holidays	Thursday – Friday	11/25/2010 – 11/26/2010
Finals	Monday	12/13/2010 12:00 pm – 1:50 pm

Attendance:

Attendance will be taken at beginning of each class. Students are expected to attend all class meetings, be on time, and be in class the entire class session. Students, who leave the class before the end of class, will be counted as tardy. Two tardiness count as one absence. Your classmates and I would greatly appreciate that you take care of your personal needs (i.e., using the restroom, getting a drink...etc.) before the class begins.

Students will be dropped from the class if they fail to attend the first class session of the semester. During the semester up to final drop date, any student who missed more than two weeks of class meetings will be dropped from this class (8 classes).

Canceled Class Notification:

Click on "Canceled Class Meetings" on Reedley College webpage (www.reedleycollege.edu) for class cancellations.

Student Conduct:

Students are expected to conduct themselves in a responsible manner in the classroom. Specific rules and regulations have been established in Board Policy 5410. Failure to adhere to the accepted standards will result in disciplinary action. Campus Policies on Student Conduct is described in Reedley College Class Schedule.

Accommodations for students with disabilities:

If you have a verified need fro an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Plagiarism and Cheating Policy:

Cheating and plagiarism is prohibited in the class. Incidents of cheating and plagiarism will result a failing grade on the particular examination or assignment in question.