

PHY 2A – General Physics I

SYLLABUS

Class Hours M T W F 8 a.m. – 8:50 a.m. (Lecture)
Tue 9 a.m. – 10:50 p.m. (Lab)

Room No PHY 70

Class No 57486

Instructor Sharon Wu

Phone 638-3641 ex-3497

Office Hours MWF 12:00 p.m. – 12:50 p.m.
or by appointment

Office FEM 4D

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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:

Physics: Principles with applications Douglas Giancoli, 6th edition, Prentice Hall

Blackboard

Blackboard is used to post course information, assignments, and announcements.

To log-in Reedley College Blackboard:

User name: your student ID

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

PHY 2A – General Physics I**Course Outline:**

1. Introduction, Measurement, Estimating
2. Describing Motion: Kinematics in One Dimension
3. Kinematics in Two Dimension; Vectors
4. Dynamics: Newton's Laws of Motion
5. Circular Motion; Gravitation
6. Work and Energy
7. Linear Motion
8. Rotation Motion
9. Static Equilibrium; Elasticity and Fracture
10. Fluid
11. Vibrations and Waves
12. Sound
13. Temperature and Kinetic Theory
14. Heat
15. The Laws of Thermodynamics

Homework Assignments:

Homework is assigned for each chapter. Homework should be done on 8.5" by 11" lined paper, stapled on upper left hand corner, with your name, class name (PHY 2A), chapter number on the upper right hand corner. Homework will be graded on **correctness, completeness, neatness, and effort** of the entire assignment. Points will be deducted for late homework. Being absent the day homework is collected does **not** entitle you to turn in the homework late without penalty!

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 short test for each chapter; one midterm, and one final exam. The exams have conceptual questions that are multiple choices; there may be some short essay questions, and there will be 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:

20% of the final grade points are from homework assignment

20% 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.

PHY 2A – General Physics I**Important Dates:**

Class begin	Monday	08/18/08
Last day to register	Friday	09/05/08
Last day to change to/from a Pass/No-Pass grading basis	Friday	09/19/08
Last date to drop:	Friday	10/17/08
No classes:		
Labor Day	Monday	09/01/08
Veteran's Day	Tuesday	11/11/08
Thanksgiving Holidays	Thursday – Friday	11/27/08 – 11/28/08
Finals	Wednesday	12/17/08 8 am – 9:50 am

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 for 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.