

Syllabus

Physics 140: Principles of Physics I

Spring 2010

T & R 9:30–10:45 a.m., UH 141

W W: 2:15–5:15 p.m., UH 050

Instructor: A. BOUKAHIL

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Office Hours: T & R: 1:00 – 3:00 p.m.

W: 12:00 – 1:00 p.m.

All other times by appointment only.

Course Description

This course is the first of a two-semester sequence which introduces the basic concepts of algebra-based physics. The topics covered include

Part 1: Mechanics: Forces, Laws of motion in one, two, and three dimensions, energy, linear and angular momentum, Fluids and Waves.

Part 2: Thermal Physics: The ideal gas, Heat, and Thermodynamics.

Corequisite: Math152.

Textbook and required materials.

The 4 items that follow are required

- 1. Physics**, 7th edition, by Cutnell and Johnson
- 2. Student Solution Manual.**
- 3. as a Second Language, Introductory Physics with Algebra, Mastering Problem-Solving**, by S. E. Loucks.
- 4. A scientific NONPROGRAMMABLE calculator.**

Exams:

Two mid-terms and a final

1. Exam 1: Thursday, Feb. 18th , in 141 UH
2. Exam 2: Thursday, Mar. 18th , in 141 UH
3. Final Exam: Tuesday, May. 11th , 10:00 – 12:00 Noon, in 141 UH

Homework:

Homework will be assigned every week in class on Thursday and will be collected the following Thursday.

Grading Policy

Your grade in this course will be based on

1. Homework (**20%**), there will be 10 assignments.
2. Midterm Exams (**50%**): **25%** exam 1, **25%** exam 2
3. The final exam is cumulative and counts **30%**.
4. The laboratory portion of this course is mandatory. Missing one Lab session will result in halving your total grade. Missing two labs will result in a failing grade for the course.

Course expectations:

I expect you to attend the lectures and actively participate by asking me questions.

I expect you to complete the reading assignment before coming to class.

I expect you to complete your homework assignment since this is how you learn the subject matter and be prepared for exams.

Grading Scale:

A	95%—100%
A ⁻	90%—94%
B ⁺	86%—89%
B	82%—85%
B ⁻	78%—81%
C ⁺	74%—77%
C	70%—73%
C ⁻	66%—69%
D ⁺	61%—65%
D	56%—60%
D ⁻	50%—55%
F	<50%

Tentative topics to be covered: Chapters 1 through 15

Course Policies:

Avoid missing a scheduled examination. No make-up exams will be given. Class attendance is **not required** but the students are **responsible** for assignments if they do miss any class period.

All electronic devices (e.g., cellular phones, pagers, I-pods, blackberries, etc.) **must be turned off while in class.** NO CELL PHONES ARE ALLOWED DURING EXAMS. You will not be allowed to use cell phones as calculators.

Week	Date	Experiment
1	Jan.20	Lab Orientation
2	Jan. 27	Errors and the Density of a Solid
3	Feb. 3	Vector Addition and Equilibrium of Forces
4	Feb. 10	Friction

Laboratory

UWW Policies

Special needs statement: Students with special needs should contact the instructor to make appropriate arrangements.

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