

**Physics 114A**  
**Introduction to Mechanics**  
(without calculus)

A course about learning basic physics concepts  
and applying them to solve real-world,  
quantitative, mechanical problems

Lecturer: Prof. Paul Boynton

## Getting started

Course Web Page:

<http://faculty.washington.edu/boynton/114AWinter08/>

Easily found though Physics Dept. web page at

<http://www.phys.washington.edu>

Select: academics, then courses, 11x & 12x series,  
114sectionA, or Phys 117

## Course Components

- Daily readings in course text book
- Lectures:
  1. Highlighting and demonstrating concepts in text
  2. Problem-solving examples
- Weekly homework:
  1. Web-based (Tycho system) due on Tuesdays
  2. Optional *Study Problems*
- Physics Study Center
- Frequent in-class mini-quizzes
- Three “midterm” exams
- “Optional” final exam

## Reading This Week

<b>week</b>	<b>date</b>	<b>lecture topic</b>	<b>reading in text</b>	<b>lab</b>
1	7-Jan	Overview	Ch 1	No Lab 1st week
	8-Jan	Position & Velocity	2-1 to 2-3	
	10-Jan	Velocity & Acceleration	2-4 to 2-7	
	11-Jan	Vectors	3-1 to 3-3	

# TYCHO HOMEWORK WEBSITE

(Link on course web page)

Site contains login instructions

**First Assignment Due Next Tuesday, January 15, before  
11:00 PM**

There is no time limit per problem. There is no penalty for trying many answers. **Late submittals receive 70% credit in following 24 hours, and zero credit thereafter.**

Tycho always expects 1% answer accuracy, even if only 1 digit is displayed in the problem statement.

## THINGS TO BUY

1. Textbook: *Physics*, J. Walker, 3<sup>rd</sup> edition, 2007.  
We will use only volume one this quarter.
2. If taking lab course: manual for phys 117,  
winter 07 (this is a coursepak is available at  
the university bookstore)
3. H-ITT transmitter (also at the bookstore)
4. Any calculator with trig functions and logarithms

## COURSE GOALS

- To explain the Basic Principles of Physics
- To understand the many Physics Concepts and Principles at a basic level
- To connect these Concepts and Principles to Real-World Behavior
- To develop skill in applying these ideas to solve quantitative physics problems. . .and thereby achieve a sense of accomplishment

## **KEYS TO SUCCESS**

(in problem solving)

Focus on understanding how each new topic fits into the pattern of previous topics to build your physics knowledge

### **PRACTICE PROBLEM SOLVING**

Never let anything go by that you do not understand. Ask questions immediately, or make a note to ask later.

MORE

### **PRACTICE PROBLEM SOLVING**