

## Syllabus and Course Policies Physics 2325 – Fall 2007

Textbook: University Physics, Volume 1, 12<sup>th</sup> edition, by Young and Freedman

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Office Hours: GDE M&W 2-3 PM

Alvin M, T & F 4:30-5:30

### Overview

Physics 2325 is an overview of Newtonian Mechanics, which essentially deals with the motion of solid objects under the influence of external forces. Students are expected to have completed a first course in calculus prior to taking Physics 2325. At the end of the course successful students will be able to use the basic equations of mechanics to mathematically describe and predict all aspects of two-dimensional motion, including cause and effect relationships involving friction, collisions, simple forces, accelerations, velocities, displacements, momentum, and energy.

### Grading

There will be two in-class exams during the semester, plus a final exam during finals week. Each of these exams will count for 20% of the course grade, with homework and quizzes (sometimes unannounced) comprising the other 40% of the grade. *No calculators are allowed on any of the exams*, but a one page formula sheet may be used. Late homework will not be accepted.

### Homework

Assignments will be done via the Pearson/Addison-Wesley website which can be found at [www.masteringphysics.com](http://www.masteringphysics.com). Registering for Physics 2325 at this website using the course ID Earle2325F07 will automatically create a gradebook listing and will allow homework assignments to be viewed and completed online. Homework assignments will be announced in class on a weekly basis, and posted on the website throughout the semester. Login information that will allow students to access the online homework resources is provided with each new textbook purchase. For students who purchased used books, the login material may be purchased separately through the website. Help on homework assignments is available through the TA, as well as through the professor. Please do not drop in spontaneously to obtain help – limit your inquiries to stated office hours only, or ask questions in class.

### Coverage

The course will cover roughly one chapter every 10 days of the semester. Several chapters will be skipped, and these will be announced in class. Chapter 1 should be a review of material covered in high school, so very little class time will be spent on it. A weekly breakdown of the reading assignments is given on the back of this page. It should be used as a guideline – changes may occur during the semester based on class progress. Students are expected to read and do homework assignments as required to keep pace with the lectures. This is true even if no reading assignment is announced in class. In most cases it should be obvious from the class notes which sections of the text are being discussed. Reading a few sections ahead (in advance of the lectures) is strongly recommended, as it will enable students to ask better questions during lectures.

### Web-based Information

This page is available on the web address given below. From time to time throughout the semester other information such as practice exams and/or helpful handouts may be made available under the “Student Resources” links on this site:

<http://www.utdallas.edu/~earle>

### Approximate Schedule

The table below shows the schedule for the semester. Some deviations from this schedule may occur during the semester – announcements in class will clarify any modifications.

<b>Week of</b>	<b>Reading Assignment</b>	<b>Lecture Topics</b>
August 20	1.1 – 1.9	Vectors, Estimation
August 27	2.1 – 2.3	Linear Velocity and Acceleration
September 3	2.4 – 2.5	Kinematic Equations
September 10	3.1 – 3.2	Position, Velocity and Acceleration Vectors
September 17	3.3	Projectiles
<b><i>September 24 – Exam 1</i></b>		
October 1	4.1 – 4.4	Newton's First and Second Laws
October 8	4.5 – 4.6	Mass, Weight, Free Body Diagrams
October 15	5.1 – 5.4	Applying Newton's Laws
October 22	6.1 – 6.4	Work, Energy, and Power
<b><i>October 29 – Exam 2</i></b>		
November 5	7.1 – 7.4	Potential Energy and Conservative Forces
November 12	8.1 – 8.3	Impulse, Momentum, and Collisions
November 19	13.1 – 13.4	Simple Harmonic Motion
<b><i>Final Exam on November 28</i></b>		