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<b>Date</b>	<b>Notes</b>	<b>Lecture Topic</b>	<b>Reading</b>
Sept 23, Wed Sept 24, Thu Sept 25, Fri	No quiz, full lecture	Motion in 1D More motion in 1D Projectile motion	1.1 – 2.4 2.5 – 2.6 3.1 – 3.3
Sept 28, Mon Sept 30, Wed Oct 1, Thu Oct 2, Fri	Quiz #1 on Ch 2.1 – 3.5	Circular motion What force is  Newton's laws	3.4 – 3.5 4.1 – 4.3  4.4 – 4.6
Oct 5, Mon Oct 7, Wed Oct 8, Thu Oct 9, Fri	Quiz #2 on Ch 4.1 – 5.2	Applying Newton's laws Friction  Force and circular motion	5.1 – 5.2 5.3  5.4
Oct 12, Mon Oct 14, Wed Oct 15, Thu Oct 16, Fri	Quiz #3 on Ch 5.3 – 6.2	Work and energy Energy and power  Potential energy	6.1 – 6.2 6.3 – 6.4  7.1 – 7.2
Oct 19, Mon Oct 21, Wed Oct 22, Thu Oct 23, Fri	Midterm, on Ch 2.1 – 7.4	Force and energy Momentum  Collisions	7.3 – 7.4 8.1 – 8.2  8.3 – 8.4
Oct 26, Mon Oct 28, Wed Oct 29, Thu Oct 30, Fri	Lecture covers topics outside textbook Quiz #4 on Ch 8.1 – 8.5 Last day to drop a class	Center of mass Rockets  Rotational kinematics	8.5 8.6  9.1 – 9.3
Nov 2, Mon Nov 4, Wed Nov 5, Thu Nov 6, Fri	Quiz #5 on Ch 8.6 – 9.5	Rotational dynamics Moment of inertia  Torque	9.4 – 9.5 9.6  10.1 – 10.2
Nov 9, Mon Nov 11, Wed Nov 12, Thu Nov 13, Fri	Quiz #6 on Ch 9.6 – 10.4	Rotational work Angular momentum  Statics	10.3 – 10.4 10.5 – 10.7  11.1 – 11.3
Nov 16, Mon Nov 18, Wed Nov 19 Thu Nov 20, Fri	Quiz #7 on Ch 10.5 – 12.3 Lecture covers topics <i>way</i> outside textbook	Gravitation Orbital motion  What gravity really is	12.1 – 12.3, 12.6 12.4 – 12.5, 12.7  12.8
Nov 23, Mon Nov 25, Wed	Yes, this lecture will be on the final	Harmonic oscillations The physical pendulum	13.1 – 13.4 13.5 – 13.6
<b>Dec 9, Wed</b>	<b>Final Exam, 7 – 9 pm in Tech L211</b>		

**Textbook:** University Physics, 12th Edition, Young & Freedman  
**Web Site:** <http://wildcat.physics.northwestern.edu/Phyx135/index.html>

### Quizzes

There is no quiz in the first week. (I will give an extra lecture instead.) After that, quizzes are every Thursday except on October 22 when we will enjoy a midterm exam. The numbers in the right-hand column of the syllabus indicate the chapter/section numbers in the textbook which you should study in conjunction with that day's lecture. The Thursday quizzes will cover the textbook sections indicated in the second column. These are typically the same sections as listed for the Wed, Fri, and Mon lectures prior to the quiz. The quizzes will usually contain two problems, which will be similar to the assigned homework for the lectures.

### Homework

About 5 to 8 homework problems will be assigned for each lecture. These will be posted on the class website. The homework problems are not collected nor graded. However, you should diligently work through every assigned problem because: 1) the quizzes will be based on the homework, 2) at least half of the points on the exams will consist of problems similar to the homework, and 3) most importantly, if you can't solve the homework problems, then you DON'T understand the physics. Trust me.

I will usually post solutions to the homework problems before you have a quiz on the problems. Usually. At least sometimes. But maybe not for all of them.

### Laboratories

There are eight laboratories for this class. They count for 10% of your grade, but you cannot decide to skip the labs and take a zero on the 10%. Students who skip three labs fail the *entire* course, automatically. You may have heard from other students that we give make-up labs at the end of the quarter. No. Used to, but then folks got into the habit of skipping labs so they could (try to) cram them all in during reading week. If you cannot make your regular lab for any reason, then you must speak to the Director of the Laboratories, Dr. Arthur Schmidt (aschmidt@northwestern.edu), and arrange to take it at a different time *that same week*. If prolonged illness or some other unavoidable issue makes it impossible to take the lab, then you again need to speak to Dr. Schmidt about a special make-up or a waiver.

### Grades

I use a strict point system: Your Grade = Quizzes (15%) + Labs (10%) + Midterm (30%) + Final (45%). Because I grade by points, you can skip all the quizzes and even the midterm if you want to. It only means that 45% of your grade is a zero. If you truly enjoy the excitement of needing an ace on the final to pull your grade up to a **D**, that is entirely your business.

I drop the lowest quiz score. This is so everyone can miss a quiz for any reason, from a wedding to the year-end clearance sale on humming bird food at Petco. This is *not* an entitlement. It is not a free drop *in addition* to missing a quiz for the clearance sale on humming bird food at Petco. Whatever your reason is for missing one quiz, that is exactly the reason that your one drop covers. If illness or other issues mean that you will miss multiple quizzes, please feel free to discuss it with me.

My primary goal when I translate points into letter grades at the end of the quarter is consistency. Students with similar point totals should have similar letter grades, and I adjust the letter grades to insure that. I do not use a curve. If everyone in the class scores 95%, then everyone gets an A.