

Physics 135-1

Syllabus

Spring 2017

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Textbook: Fundamentals of Physics, Extended 10th edition, Halliday, Resnick, & Walker
Web Site: <http://courses.physics.northwestern.edu/Phyx135/>

Date	Reading	Lecture Topic/Events
Mon, Mar 27	2.1 – 2.5	Speed and Acceleration
Wed, Mar 29	4.1 – 4.7	2D and 3D Motion
Thu, Mar 30		No Quiz
Fri, Mar 31	5.1 – 5.3	Newton's Laws of Motion
Mon, Apr 3	5.1 – 5.3	How Force Works
Wed, Apr 5	6.1	Friction
Thu, Apr 6	Mon 3/27 – Mon 4/3	Quiz #1
Fri, Apr 7	6.2 – 6.3	More About Newton's Laws
Mon, Apr 10	7.1 – 7.6	Work, Kinetic Energy
Wed, Apr 12	8.1 – 8.5	Potential Energy
Thu, Apr 13	Wed 4/5 – Mon 4/10	Quiz #2
Fri, Apr 14	9.1 – 9.3	Conservation of Momentum
Mon, Apr 17	9.4 – 9.8	Collisions
Wed, Apr 19	9.9	Rockets
Thu, Apr 20	Mon 3/27 – Mon 4/17	Midterm I
Fri, Apr 21	10.1 – 10.4	Rotation
Mon, Apr 24	10.5 – 10.6	Rotational Inertia
Wed, Apr 26	10.7 – 10.8	More Rotation
Thu, Apr 27	Wed 4/19 – Mon 4/24	Quiz #3
Fri, Apr 28	11.1 – 11.3	Rolling
Mon, May 1	11.4 – 11.8	Angular Momentum
Wed, May 3	11.9	Gyroscopes
Thu, May 4	Wed 4/26 – Mon 5/1	Quiz #4
Fri, May 5	12.1 – 12.2	Static Equilibrium
Mon, May 8	12.3	Elasticity
Wed, May 10	13.1 – 13.5	Gravitation
Thu, May 11	Wed 4/19 – Mon 5/8	Midterm II
Fri, May 12	13.6 – 13.7	Orbital Theory I
Mon, May 15	13.6 – 13.7	Orbital Theory II
Wed, May 17	13.8	Einstein and Gravity
Thu, May 18	Wed 5/10 – Mon 5/15	Quiz #5
Fri, May 19	14.1 – 14.5	Fluids I

Mon, May 22	14.6 – 14.7	Fluids II
Wed, May 24	15.1 – 15.6	Harmonic Motion
Thu, May 25	Wed 5/17 – Wed 5/24	Quiz #6
Fri, May 26	15.4	The Physical Pendulum

Mon, 5/29 – Mon, 6/2

Reading Week

Tue, June 6 **Final Exam, 3 – 5 pm**

Course Grade: Quizzes (16%) (best 5 out of 6)
 Pop-Up Quizzes (8%) (best 5 out of 6)
 Midterm I (18%)
 Midterm II (18%)
 Final (40%)

Quiz Information

There is no quiz in the first week. After that, quizzes are every Thursday except on April 20 and May 11 when we will enjoy midterm exams instead. The lectures covered by each quiz are given in the second column above. The quizzes will typically contain one or two problems, and these will be similar to the assigned homework for the lectures.

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 another for your wedding or the clearance sale on humming bird food at Petco. Your reason for missing one quiz is exactly the reason that this drop covers. If illness or other issues mean that you will miss multiple quizzes, please feel free to discuss it with me.

As a rule, it is assumed that students will attend every lecture. I will not take formal attendance, but I will give what I call “Pop-Up quizzes” about once a week. The Pop-Ups are little quizzes that I will announce *the night before* by email, mainly so that you will know you really do need to come to class. The Pop-Ups will cover the assigned reading for that day, plus whatever I discuss in the lecture. They will be handed out at the start of class and collected at the end. In between, you can fill them out at your leisure as I lecture on the material covered by the Pop-Up. As with the Thursday quizzes, I will drop your lowest Pop-Up.

Other Information

Note that students in Phyx 135-1 must also register for Physics Lab 136-1, unless you have received a waiver due to AP credit. I am not directly associated with Phyx 136-1. Questions about the lab should be addressed to the lab instructor, Dr. Arthur Schmidt (aschmidt@northwestern.edu).

I don't use Blackboard or Canvas. Everything I post for the class on-line will be at:
<http://courses.physics.northwestern.edu/Phyx135/>

How To Make A Good Grade In My Class

Do all the homework. Come to all the lectures. Read all the assigned pages in the textbook. In my classes, the homework problems are recycled into the quizzes, and the quizzes are recycled into the exams. If I talk about it in class, then it is approximately 9944 times more likely to be on an exam than if I don't. Do the homework. Don't skip class. Read the book.