

PHY131 LEC#01 JAN 7, 2013

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MP129B

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course website: www.physics.utoronto.ca/~dey/PHY131S.html

Topics: Classical Mechanics and Fluid Mechanics

Schedule: Lectures MW11 (MP102), Physics Practicals (MP125-C beginning on Thursday, January 17, 2013)

Course Administrator: April Seeley, MP129, 416-946-0531, seeley ==
physics.utoronto.ca

Text: Physics for Scientists and Engineers, third edition, by R. Knight.

You will also require an account on MasteringPhysics (www.masteringphysics.com), an i-Clicker response device, and a nonprogrammable scientific calculator. These items are available in the University of Toronto Bookstore (214 College St.) at the corner of College St. and St. George St.

Register your i-Clicker at www.iclicker.com using your Student Name and Student Number as they appear on ROSI.

Go to <http://www.masteringphysics.com> and click on Register New Students after January 9, 2013. Enter your Access Code that was obtained with your textbook or separately from the UofT Bookstore. Enter your Student Name and Student Number as they appear on ROSI. The course ID is MPPHY131S13. After viewing a MasteringPhysics Problem Set, you should try solving it on paper away from the computer. This will help prepare you for the Term Test and Final Exam, as will the following End of Chapter questions from Professor Knight's textbook.

Chapter 1: 1.21, 1.51

Assessment

MasteringPhysics Problem Sets 5%

In-Lecture Evaluations (**1 - Wednesday, January 30, 2013, 11:45 a.m.,**

MPI02 -- 2 - Wednesday, March 27, 2013, 11:45 a.m., MPI02) 10%

Physics Practicals 20%

Term Test (**Wednesday, February 27, 2013, 11:10 a.m.-12:00 p.m.)**)
20%

Final Exam 45%

Lectures and Physics Practicals

Week Topics [References](#) [MasteringPhysics](#) [Problem Sets](#) [Physics Practicals](#)
[YHT=If You Have Time]

1- January 7, 9 Introduction, Concepts of Motion [Chapter 1](#)

2- January 14, 16 Kinematics in One Dimension [Chapter 2](#) [PS1](#) - 1 - Jan. 17, 18

3- January 21, 23 Vectors, Kinematics in Two Dimensions [Chapters 3, 4](#) (Omit
[Eqs. 4.21, 4.24](#)) [PS2](#) - 2 - Jan. 24, 25

4- January 28, 30 Force, Dynamics in One Dimension [Chapters 5, 6](#) (Omit [Eqs.](#)
[6.3, 6.4](#)) [PS3](#) - 3 - Jan. 31, Feb. 1

5- February 4, 6 Newton's Third Law, Dynamics in Two Dimensions [Chapters 7, 8](#)
[PS4](#) - 4 - Feb. 7, 8

6- February 11, 13 Momentum, Energy [Chapters 9, 10](#) [PS5](#) - 5 - Feb. 14, 15

7- February 25, 27 Energy, Term Test (Feb. 27, 11 a.m.) [Chapter 10](#) [6](#) - Feb. 28, Mar.
1

8- March 4, 6 Work [Chapter 11](#) [PS6](#) - 7 - Mar. 7, 8

9- March 11, 13 Rotations [Chapter 12](#) [8](#) - Mar. 14, 15

10- March 18, 20 Rotations, Oscillations [Chapters 12, 14](#) [PS7](#) - 9 - Mar. 21, 22

11- March 25, 27 Oscillations [Chapter 14](#) [PS8](#) - 10 - Mar. 28, 29

12- April 1, 3 Fluids [Chapter 15](#) (Omit Section 15.6)

How to do well in PHY131S

- Read the text before the "lectures".
- Actively participate in class and the Physics Practicals.
- Practice.
- Form a study group.

www.asc.utoronto.ca (Academic Success Centre)

