

SYLLABUS

Textbook: Young and Freedman, University Physics, 12th edition, (Addison Wesley, 2007).

Useful References:

A host of introductory texts is shelved in Gordon Library, QC 21-23. Several are also conveniently located in Olin 118 (a very comfortable room to study in). Examples are:

Serway & Beichner, Physics for Scientists and Engineers

Tipler, Physics

Wolfson & Pasachoff, Physics

Halliday, Resnick & Walker, Fundamentals of Physics

LECTURE TOPICS:

The schedule of day-by-day lecture topics is listed below. To get the most out of each lecture, you should read -- AHEAD OF TIME! -- the respective objectives and skim through the relevant sections in the text as indicated, so that the lecture discussions will have something to stick to in your memory banks.

| DATE | LECTURE TOPIC | STUDYGUIDE/OBJECTIVES |
|-----------------|--|-----------------------|
| 1. Th 8/27 | Introduction to Course Vectors (Ch. 1, Secs. 7,8,9) | 1, Obj. 2 - 5 |
| 2. F 8/28 | Displacement, Velocity, Acceleration (Ch. 2, Secs. 1,2,3,4) | 1, Obj. 6, 7 |
| 3. M 8/31 | Velocity & Acceleration Motion in One & Two Dimensions Projectile Motion (Ch. 2, Secs. 2,3,4,5) (Ch. 3, Secs. 1, 2, 3) | 1, Obj. 6, 7, 8, 9 |
| 4. W 9/2 | Motion in One & Two Dimensions, continued. | 1, Obj. 6, 7, 8, 9 |
| 5. F 9/4 | Circular Motion (Ch. 3, Sec. 4) Newton's Laws of Motion (Ch. 4, Secs. 1-5) | 2, Obj. 10, 11 |
| Wed. 9/9 | EXAMINATION NO. 1 (ON STUDY GUIDE 1) 10:00-10:50 a.m. for Sections 1 to 7 1:00-1:50 p.m. for Sections 8 to 14 | |
| 6. F 9/11 | Using Newton's Laws (Ch. 4, Secs. 5,6; Ch. 5, Secs. 1,2) | 2, Obj. 12, 13 |
| 7. M 9/14 | Using Newton's Laws (Ch. 5, Secs. 1-4) | 2, Obj. 12, 13, 14 |

PH1110 SYLLABUS - continued

| | | |
|-------------------|---|------------------------|
| 8. W 9/16 | Using Newton's Laws (Ch. 5, Secs. 1-4) | 2, Obj. 12, 13, 14 |
| Fri. 9/18 | EXAMINATION NO. 2 (ON STUDY GUIDE 2) | |
| 9. M 9/21 | Work, Energy, & Power (Ch. 6, Secs. 1,2,4) | 3, Obj. 15, 16, 17, 18 |
| 10. W 9/23 | Conservation and Non-Conservative Forces Conservation of Energy (Ch. 6, Sec. 3; Ch. 7, Secs. 1-3) | 3, Obj. 19, 20, 21 |
| 11. F 9/25 | Momentum & Impulse Conservation of Momentum (Ch. 8, Secs. 1,2,3,4) | 3, Obj. 22, 23, 24 |
| 12. M 9/28 | Conservation of Momentum Elastic & Inelastic Collisions (Ch. 8, Secs. 1-4) | 3, Obj. 24 |
| 13. W 9/30 | Torque, Static Equilibrium (Ch. 10, Sec. 1; Ch. 11, Secs. 1-3) | 4, Obj. 25 |
| Fri. 10/2 | EXAMINATION NO. 3 (ON STUDY GUIDE 3) | |
| 14. M 10/5 | Rotational Kinematics (Ch. 9, Secs. 1,2,3) | 4, Obj. 26 |
| 15. W 10/7 | Rotational Dynamics (Ch. 9, Sec. 4; Ch. 10, Secs. 1-4) | 4, Obj. 27 |
| 16. F 10/9 | Angular Momentum and Conservation of Angular Momentum (Ch. 10, Secs. 5,6) | 4, Obj. 28, 29, 30 |
| 17. M 10/12 | Conservation of Angular Momentum | 4, Obj. 28, 29, 30 |
| Wed. 10/14 | EXAMINATION NO. 4 (ON STUDY GUIDE 4) | |

If you need course adaptations or accommodations because of a disability, or if you have medical information to share with us, please make an appointment with T. H. Keil as soon as possible. If you have not already done so, and you are a student with disabilities, and you believe that you may need accommodations in this class, you are encouraged to contact the Disability Services Office (DSO) as soon as possible to ensure that such accommodations are implemented in a timely fashion. The DSO is located in Daniels Hall, (508) 831-5235