## PH 1111 Principles of Physics - Mechanics

## **SYLLABUS**

**Textbook**: Halliday, Resnick, & Walker, <u>Fundamentals of Physics</u>, 9<sup>th</sup> edition, (John Wiley, 2010). **Useful References:** A host of introductory texts is shelved in Gordon Library, QC 21-23. Several are also conveniently

located in Olin 118 (<u>a very comfortable room to study in</u>). Examples are: Serway & Beichner, <u>Physics for Scientists and Engineers</u>

Tipler, <u>Physics</u> Wolfson & Pasachoff, <u>Physics</u> Young & Freedman, <u>University Physics</u>

## **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
1. Th 8/23	Introduction to Course
2. F 8/24	Displacement, Velocity, Acceleration in One Dimension (Ch. 2, Secs. 1 through 10)
3. M 8/27	Displacement, Velocity, Acceleration in One Dimension
4. W 8/29	Vectors (Ch. 3, Secs.1 through 8)
5. F 8/31	Motion in Two Dimensions (Ch. 4, Secs. 1 through 7)
Wed. 9/5	EXAMINATION NO. 1 (ON Chapters 2, 3, and 4) 9:00-9:50 a.m. for Sections 1 to 8
6. F 9/7	Force and Motion I (Ch. 5, Secs. 1 through 9)
7. M 9/10	Force and Motion I
8. W 9/12	Force and Motion II (Ch. 6, Secs. 1 through 5)
9. Fri. 9/14	Force and Motion II
10. M 9/17	Kinetic Energy and Work (Ch. 7, Secs. 1 through 9)
11. W 9/19	Potential Energy and Conservation of Energy (Ch. 8, Sec. 1 through 8)

## PH1111, A2011, Syllabus (continued)

Wed. 10/10	EXAMINATION NO. 3 (ON Chapters 10 and 11)
18. M 10/8	Equilibrium (Ch. 12, Secs. 1 through 5)
17. F 10/5	Rolling, Torque, and Angular Momentum
16. W 10/3	Rolling, Torque, and Angular Momentum (Ch. 11, Secs. 1 through 11)
15. M 10/1	Rotation
14. F 9/28	Rotation (Ch. 10, Secs. 1 through 10)
Wed. 9/26	EXAMINATION NO. 2 (ON Chapters 5, 6, 7, 8, and 9)
13. M 9/24	Center of Mass and Linear Momentum (Ch. 9, Secs. 1 through 11)
12. F 9/21	Conservation of Energy

If you need course adaptations or accommodations because of a disability, or if you have medical information to share with me, please make an appointment with T. H. Keil (<u>thkeil@wpi.edu</u>) as soon as possible. If you have not already done so, and you are a student with disabilities, and you believe that 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 Student Development and Counseling Center, (508) 831-4908.