SYLLABUS


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.

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<th>DATE</th>
<th>LECTURE TOPIC</th>
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<td>1. F 1/14</td>
<td>Introduction to Course</td>
<td>1, Obj. 2 - 5</td>
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<td>Vectors (Ch. 1, Secs. 7,8,9)</td>
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<td>2. W 1/19</td>
<td>Displacement, Velocity, Acceleration</td>
<td>1, Obj. 6, 7</td>
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<td>(Ch. 2, Secs. 1,2,3,4)</td>
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<tr>
<td>3. F 1/21</td>
<td>Velocity &amp; Acceleration</td>
<td>1, Obj. 6, 7, 8, 9</td>
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<td>Motion in One &amp; Two Dimensions</td>
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<td>Projectile Motion</td>
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<td>(Ch. 2, Secs. 2,3,4,5) (Ch. 3, Secs. 1, 2, 3)</td>
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<td>4. M 1/24</td>
<td>Motion in One &amp; Two Dimensions, continued.</td>
<td>1, Obj. 6, 7, 8, 9</td>
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Wed. 1/26  EXAMINATION NO. 1 (ON STUDY GUIDE 1)
10:00-10:50 a.m.

| 5. F 1/28 | Circular Motion (Ch. 3, Sec. 4)                                              | 2, Obj. 10, 11         |
|          | Newton's Laws of Motion                                                      |                        |
|          | (Ch. 4, Secs. 1-5)                                                          |                        |
| 6. M 1/31 | Using Newton's Laws                                                          | 2, Obj. 12, 13         |
|          | (Ch. 4, Secs. 5,6; Ch. 5, Secs. 1,2)                                        |                        |
| 7. W 2/2 | Using Newton's Laws                                                          | 2, Obj. 12, 13, 14     |
|          | (Ch. 5, Secs. 1-4)                                                          |                        |
8. F 2/4  Using Newton's Laws  2, Obj. 12, 13, 14
   (Ch. 5, Secs. 1-4)

   Mon. 2/7  EXAMINATION NO. 2 (ON STUDY GUIDE 2)

   (Ch. 6, Secs. 1,2,4)

10. F 2/11  Conservation and Non-Conservative Forces
           Conservation of Energy  3, Obj. 19, 20, 21
       (Ch. 6, Sec. 3; Ch. 7, Secs. 1-3)

11. M 2/14  Momentum & Impulse
           Conservation of Momentum  3, Obj. 22, 23, 24
       (Ch. 8, Secs. 1,2,3,4)

12. W 2/16  Conservation of Momentum
           Elastic & Inelastic Collisions  3, Obj. 24
       (Ch. 8, Secs. 1-4)

   Fri. 2/18  EXAMINATION NO. 3 (ON STUDY GUIDE 3)

13. M 2/21  Torque, Static Equilibrium  4, Obj. 25
         (Ch. 10, Sec. 1; Ch. 11, Secs. 1-3)

14. W 2/23  Rotational Kinematics  4, Obj. 26
         (Ch. 9, Secs. 1,2,3)

15. F 2/25  Rotational Dynamics  4, Obj. 27
         (Ch. 9, Sec. 4; Ch. 10, Secs. 1-4)

16. M 2/28  Angular Momentum and Conservation
           of Angular Momentum  4, Obj. 28, 29, 30
       (Ch. 10, Secs. 5,6)

17. W 3/2  Conservation of Angular Momentum  4, Obj. 28, 29, 30

   Fri. 3/4  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 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