Physics I/160 Syllabus

Instructor’s office 126A. MW 3:15-4, T 9:30-10:00, 4:15-5:30, Th 9:30-10, 11:45-12:30, 1:15-2:45, 4:15-5:30. wcmurray@unm.edu, 505-925-8727

Pre- or Co-requisite: Math 162 (Calculus I)

Useful Materials:
Calculator: A scientific graphing calculator will often be useful—arithmetic, scientific notation, trig/inv trig functions, exponents, logs, and occasional graphing. Calculators may be used on tests, although all solutions requiring calculations must show those calculations, clearly and in detail, on paper—merely writing down a result from a calculator (other than arithmetic), without giving the full reasoning &/or mathematics behind it, will result in reduced or zero credit.

Course Learning Objectives: By the end of the course, the student should be able to correctly explain and solve problems involving at least the following: 1) units of physical measure; 2) linear motion: position, velocity, and acceleration; 3) basic vector arithmetic; 4) force, types of forces, and the concept of net force; 5) Newton’s 1st, 2nd, & 3rd laws of motion; 6) free-fall motion; 7) two-dimensional projectile motion; 8) mechanical energy: kinetic, gravitational potential, and elastic; 9) rotational motion; 10) translational and rotational equilibrium situations; 11) centripetal force and acceleration; 12) torque and its effect on rotation; 13) simple harmonic motion; 14) wave motion, including 15) sound.

Academic Dishonesty as defined in the UNM-VC catalog includes copying work from other students. Any student found doing this on tests is subject to disciplinary action, ranging from “a reduced or failing grade for the work in question and/or the course” to “dismissal from the University”.

Disruptive Behavior is any behavior which interferes with other student’s learning or the instructor’s ability to guide that learning. Examples include loud talking/laughing/chatting with your buddy which require repeated warnings from the instructor, or derisive/ridiculing comments toward well-meaning students or the instructor—this is the quickest way to being expelled from the class. Keep your motives constructive, and it’ll be a good educational experience.

Children in Class (UNM-VC) Children are not permitted in class. This is regrettable, but it is due to liability concerns.

Disabilities (UNM-VC): Should you have a documented disability requiring special accommodations, please bring the instructor documentation from Equal Access Services, so appropriate accommodations can be made.

Makeup Work: Tests: There are no makeup tests, except in genuine emergencies—in such cases, expect a max score 80%. (Early tests, however, might be arranged without penalty.) If you skip a test, you cannot receive an A+ or A for the course.
Homework: 1 day late, -50%; 2 days late, -100%

Attendance: Required. After 4 accumulated absences, the student may be dropped from the course without notice.

Electronic Communications Devices, incl laptops, cellphones and such: Must be Off at all times during class. No text messaging during class; if you must text message, do it outside the classroom.

Grade weighting:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Max possible points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>100</td>
<td>550</td>
</tr>
<tr>
<td>4 tests</td>
<td>-100</td>
<td>550</td>
</tr>
<tr>
<td>Drop lowest one of tests or homework:</td>
<td>-100</td>
<td>550</td>
</tr>
<tr>
<td>Final exam (not dropped, comprehensive, min score 65% to pass course)</td>
<td>150</td>
<td>550</td>
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532 ≤ x ≤ 550       A+    (unless a test is missed, or homework score is less than 50%)
512 ≤ x < 532        A     (unless a test is missed)
495 ≤ x < 512        A-    
477 ≤ x < 495        B+    
457 ≤ x < 477        B     
440 ≤ x < 457        B-    
422 ≤ x < 440        C+    
402 ≤ x < 422        C     
385 ≤ x < 402        C-    
330 ≤ x < 385        D     
0 ≤ x < 330          F     