California State Polytechnic University, Pomona  
Winter 2016  

Physics 122  Syllabus  

Instructor:  Dr. Jamshid Armand  
Office: Building 8, Room 221  
Office Hours:  
Tuesday;  10:45 - 12:00 &  1:00 – 2:15  
Thursday  10:45 - 12:00 &  1:00 – 2:15  
Phone:  869-4032  
email: jarmand@csupomona.edu  
Web page: www.csupomona.edu/~jarmand  

Text: Physics, 4th Edition,  
By: James S. Walker  
Coverage:  Chapters: 13 – 18 & 26 – 28  

Homework:  17 %  
Classwork:  8 %  
Midterm:  40 %  
Final:  35 %  

Pre & co-Requisites:  Pre: Phy121 & Phy121L  
Co: Phy122 Lab.  

Reading Assignments:  

A wide range of study has shown that reading in advance is very helpful to deeper understanding of the subject even if you do not understand a word of it. I encourage you to read the sections from the chapters that will be discussed in the lecture, prior to our meeting. Reading assignments will be posted weekly, on my webpage.  

Homework:  17 %  

Homework is the single most important and most time consuming aspect of any physics course. By not doing work on you own the chance of learning the subject and passing the course decreases significantly. Each week about 13, problems will be given to you as the homework assignment for that week. My suggestion to you is;  
a) Read the chapter from your textbook and read the notes taken in the class.  
b) Refer to my web page and look at the summary of the chapter you just read  
c) Answer the questions of the “self-test” section on my web page.  
These will prepare you to start working on the homework assignment.
The home assignment is split into two parts:

**Homework Part 1 (12%): Assignment from Mastering Physics:**

Ten to 12 problems per week will be assigned on a program called “Mastering Physics”. Each student must have a copy of *Mastering Physics* that accompanies the textbook when you buy a new copy. If you have purchased a used copy, you can buy the access code on line. This program is very useful and has hints, in case you need some, and tutorials that takes you step by step through the solution to a similar problem. You can see your score and the solutions to the problems right after you are done with the problem set. Keep a copy of your solutions for the future review. The due date for this part of the homework is generally **Wednesdays, 11:58pm** of each week. There might be some changes to the due date throughout the quarter, that you will see it following the assignment.

**Homework Part 2 (5%): Assignment to be turned in, in the class:**

At least 3 or 4 problems will be assigned on Mastering Physics under name “3 Problems”. They might be from your text as well as from other sources. A hard copy of the solution to this part should be turned in on Thursday lecture, before the lecture starts. There will be a box on my desk. As you walk in, please place the homework in the box. The box will be removed half hour through the lecture and work turned in after will be considered late and you will loose 80% of the grade for this part of the homework. **No homework will be accepted after the due date, for any reasons!**

**Quiz: 8%**

**In-Class group work:**

The last 10 minutes of the Thursday lecture will be reserved for a group quiz. You will have a quiz partner and will work together to answer a few multiple choice, mostly conceptual questions. You might have some take home and on-line quizzes also, in which case you will be informed.

**Midterms: 40 %**

There will be only one midterm.

- **Midterm 1:** Thursday Jan. 28  
  Covering chapters: 13, 14, 15  
  20 %

- **Midterm 2:** Tuesday Feb. 23  
  Covering Chapters: 16, 17, 18  
  20%

The dates of the tests might change in which case it will be announced in the class. **NO MAKE UP.**
Final: 35%

Final exam is comprehensive with emphasize on the last 4 chapters. All exams, midterms and the final, will consist of a combination of problem solving and multiple-choice questions.

The final is on: ---------------------------------------------

Extra-Credit: %4

For those of you who need more help and/or want a higher grade, I will assign a few extra problems per week from Mastering Physics. This only helps the students who choose to do them and it will not affect those who choose not to. This part worth 4%, EXTRA CREDIT and it will be added to your grade after the letter grades are assigned for the whole class.

Grading Policy:

The grades will be curved at the end of the quarter with C being the average.

Changes:

The instructor reserves the right to make changes in syllabus. The changes will be announced in the class and you are responsible to know about them and make the necessary adjustments.

Academic Integrity:

The California State Universities Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with this policy. The work includes the in class and take home exams, quizzes, assignments, reports, and participation in class activities. Serious sanctions can result from academic dishonesty of any sort. You are encouraged to seek help on home work assignments, or work in groups, but at the end the submitted work must be of your own.

A tentative class schedule For Physics 122:
<table>
<thead>
<tr>
<th>Week of</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 4</td>
<td>Intro 13 – 13.4</td>
<td>-----</td>
<td>Ch. 13.5 – 13.7</td>
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<tr>
<td>Jan 11</td>
<td>Ch. 14 – 14.4</td>
<td>-----</td>
<td>Ch. 14.5 – 14.7</td>
</tr>
<tr>
<td>Jan 18</td>
<td>Ch. 14.8 – 15.3</td>
<td>-----</td>
<td>Ch. 15.4 - 15.7</td>
</tr>
<tr>
<td>Jan 25</td>
<td>Ch. 15.8 16.1 – 16.4</td>
<td>-----</td>
<td>&quot;Happy Hour 1&quot;</td>
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<tr>
<td>Feb 1</td>
<td>Ch. 16.5 – 16.6</td>
<td>-----</td>
<td>Ch. 17.1 – 17.2</td>
</tr>
<tr>
<td>Feb 8</td>
<td>Ch. 17.3 – End</td>
<td>-----</td>
<td>Ch. 18 – 18.4</td>
</tr>
<tr>
<td>Feb 15</td>
<td>Ch. 18.5 - End</td>
<td>-----</td>
<td>Ch. 26</td>
</tr>
<tr>
<td>Feb 22</td>
<td>&quot;Happy Hour 2&quot;</td>
<td>-----</td>
<td>Ch. 26</td>
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<tr>
<td>Feb 29</td>
<td>Ch. 27</td>
<td>-----</td>
<td>Ch. 27</td>
</tr>
<tr>
<td>March 7</td>
<td>Ch. 28</td>
<td>-----</td>
<td>Ch. 28</td>
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<tr>
<td>March 14</td>
<td>Final’s Week</td>
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**Home work Assignments**
<table>
<thead>
<tr>
<th>Week of</th>
<th>Wiley Assignments</th>
<th>Due Date Wed.</th>
<th>In-class Assignments</th>
<th>Due Date Th.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jan 4</strong></td>
<td>Ch.13: 6, 10, 11, 18, 30, 39, 43, 47, 54, 64, 67, 95</td>
<td>Jan 13</td>
<td>Ch. 14: 17, 23, 25</td>
<td>Jan 14</td>
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<tr>
<td><strong>Jan 11</strong></td>
<td>Ch.14: 5, 19, 33, 35, 38, 41, 44, 45, 47, 50, 55</td>
<td>Jan 20</td>
<td>Ch.14: 65, 69, 75, 76</td>
<td>Jan 21</td>
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<tr>
<td><strong>Jan 18</strong></td>
<td>Ch. 15: 8, 17, 18, 24, 28, 32, 33, 43, 49, 55, 60</td>
<td>Jan 27</td>
<td>Ch.14: 102 Ch.15: 48, 88, 112</td>
<td>Jan 29</td>
</tr>
<tr>
<td><strong>Jan 25</strong></td>
<td>Ch.16: 6, 18, 19, 23, 30, 38, 41, 43, 49, 53</td>
<td>Feb 3</td>
<td>Ch.16: 56, 63, 87</td>
<td>Feb 4</td>
</tr>
<tr>
<td><strong>Feb 1</strong></td>
<td>Ch.17: 8, 13, 19, 26, 27, 31, 39, 58, 59, 66, 67</td>
<td>Feb 10</td>
<td>Ch.17: 68, 71, 89</td>
<td>Feb 11</td>
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<tr>
<td><strong>Feb 8</strong></td>
<td>Ch.18: 6, 11, 14, 15, 16, 17, 18, 21, 25, 35, 45, 87</td>
<td>Feb 17</td>
<td>Ch.18: 41, 47, 52, 93</td>
<td>Feb 18</td>
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<tr>
<td><strong>Feb 15</strong></td>
<td>Ch.26: 3, 8, 21, 22, 29, 35</td>
<td>Feb 24</td>
<td>No Assignment</td>
<td></td>
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<tr>
<td><strong>Feb 22</strong></td>
<td>Ch.26: 42, 57, 59, 64, 80, 110 Ch.27: 3, 4, 7, 25, 28, 29,</td>
<td>Mar 2</td>
<td>Ch.26: 30, 43, 74, 75</td>
<td>Mar 3</td>
</tr>
<tr>
<td><strong>Feb 29</strong></td>
<td>Ch.27: 31, 32, 35, 36, 40, 52</td>
<td>Mar 9</td>
<td>Ch.27: 72, 75, 95</td>
<td>Mar 10</td>
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<tr>
<td><strong>Mar 7</strong></td>
<td>Ch.28: 17, 20, 21, 22, 25, 30, 31, 32, 34, 37, 50, 93</td>
<td>Mar 17</td>
<td>Ch.28: 40, 41, 71, 86</td>
<td>The day of Final</td>
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</tbody>
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**Finals Week**

*Have a pleasant quarter.*