Physics 141: General Physics 1A, Fall 2015

Syllabus

All necessary information can be found on the Course Materials page in PolyLearn. The webpage will be updated frequently on quiz/exam dates, homework assignments, and all other class matters. You should check it frequently!

Course Information

Required Texts: Physics for Scientist and Engineers, R. Knight, 3rd edition (Student workbook is recommended but not required).

Course Reader (available at bookstore or on PolyLearn).

Course Webpage: http://www.calpoly.edu/~tmastori/phys141fall2015.html

Learning Objectives

This is the first quarter of our three-quarter introductory physics with calculus. A strong background in calculus, geometry, algebra, and trigonometry will be necessary. The Learning Objectives include the ability to describe motion, forces, and their relationship in terms of mathematics, to solve problems in an organized and systematic way using free body diagrams, and to apply the laws of conservation of energy and conservation of momentum. Detailed Learning Objectives and Criteria can be found at http://physics.calpoly.edu/sites/physics/files/other_docs/Physics141CourseOutline109.pdf.

PolyLearn Access

All students will be enrolled in the MAIN PolyLearn course with course ID PHYS-141-05-2158. If you are in the 1:10-2:00 pm section, this will be the course that appears in your list of Enrolled Classes. If you are in the 2:10-3:00 pm section, the course PHYS-141-05-2158 will be in the PolyLearn Access (You are NOT officially enrolled in this class) section under “My Classes” in the portal. Please let me know as soon as possible if you are having trouble using PolyLearn or accessing the course webpage.

Instructor Information

Professor Dr. Themis Mastoridis
E-mail tmastori@calpoly.edu
Office Building 180, Room 609
Phone 805-756-2197
Webpage http://www.calpoly.edu/~tmastori/

Office Hours

Please check the class PolyLearn site for office hours as they might change based on your feedback and my availability. Please let me know if the posted office hours don’t work for you.

Tentative Schedule

Please refer to the class schedule page, http://www.calpoly.edu/~tmastori/phys141fall2015.html for the latest on quiz/exam dates and homework assignments. This page is also linked from PolyLearn in the Class Schedule section.

Groups

You will be expected to work in groups during the course. The group interaction should help you determine whether you have fully comprehended a concept through discussion with your fellow students. You will be randomly placed into small groups in the beginning of the quarter. The groups might be changed during the quarter. Please let me know if you do not wish to be placed in a group.

Course Reader

The course reader is available in the bookstore. You can also download and print it from PolyLearn. You are required to have a hard copy. I will discuss this in more detail in class, but part of the reason for this is that I want you to be able to focus as much as possible during class on understanding the physics and example problems that we are discussing. You should still plan to take notes during class, and I will not include solutions to the example problems in the course reader. However, I do not want your focus in class to be on frantically writing as quickly as possible.

Assessment

The class grade will be determined as follows:
Letter grades will be assigned based on your numerical average at the end of the course, roughly following the table below.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 and above</td>
<td>A-, A</td>
</tr>
<tr>
<td>80-89</td>
<td>B-, B, B+</td>
</tr>
<tr>
<td>70-79</td>
<td>C-, C, C+</td>
</tr>
<tr>
<td>60-69</td>
<td>D-, D, D+</td>
</tr>
<tr>
<td>0-59</td>
<td>F</td>
</tr>
</tbody>
</table>

**Homework**

Homework will be assigned daily, but will be due every Monday before class. **Late homework will not be accepted!** Completing your work in a timely manner will help you with the weekly quizzes and allow you to keep up with class progress. You will use a free online system for your homework (LON-CAPA). Instructions on accessing and using this system is posted on PolyLearn.

You are encouraged to work in groups. Please keep in mind though that for quizzes and exams you will need the ability to solve problems alone.

A challenge problem from the book will be included with each weekly assignment. Video solutions of these problems are posted on PolyLearn. Please use these solutions reasonably!

**Quizzes**

There will be a quiz at the beginning of class on most Mondays. Quizzes will be based on homework and they **might** include reading questions. Please use the quizzes as feedback on your progress. Feel free to talk to me if you are concerned with your performance. Quizzes cannot be rescheduled. The quizzes are closed book but necessary equations will be provided.

**Exams**

There will be two in-class exams and one comprehensive final exam. Exams **cannot** be rescheduled, **except** for emergency situations. Exams are closed book. Necessary equations will be provided. The final exam will be on:

- **Section 05** Monday, December 7\textsuperscript{th} 1:10-4:00 PM
- **Section 06** Wednesday, December 9\textsuperscript{th} 1:10-4:00 PM

Keep those dates in mind when you make your travel plans!

**Accessibility**

If you have a disability which requires an accommodation in this class, please discuss your concerns with me, but you should also consult the Disability Resource Center as soon as possible. Though I am happy to help you in any way I can, I cannot make any accommodations for learning (or other) disabilities without proper authorization from the Disability Resource Center. In particular, if you have a learning disability that requires that you have additional time on exams, you must submit a Test Accommodation request through the DRC. These requests are available online at http://drc.calpoly.edu/. Click on the “DRC Services” and choose “Test Accommodations”.

**Attendance**

I will not monitor your attendance in this class. You should keep in mind though that during class we will develop skills that will be necessary during exams. Your failure to attend class routinely will significantly lower your grade.

**Calculators and phones**

No computers, cell phones, tablets, and similar devices are allowed during quizzes and exams. **Non-programmable** scientific calculators are allowed and will be useful. You could use your computers and tablets to **take digital notes**, as long as you do not disturb your classmates.

**Academic Honesty**

In general, the rules set forth in the Campus Administrative Manual (CAM) apply. I expect that all of you will behave with honesty and integrity.

**Tips for success**

- Read the material **before** coming to class. Attend class!
- Remember that in this class you want to develop your analytical and problem solving skills. The best way to improve is by practicing. Work on your homework, do the examples from the textbook, and/or work on some additional odd numbered problems or the workbook.
- Remember the 25-35 rule: you should devote about 2 hours per unit per week.
- Use resources available to you such as office hours and extra examples in the book. The Learning Center, the Academic Skills Center and Student Support Services offer various programs to assist you. **Study Session** is a Student Success Fee program that forms study groups for specific lower division classes each quarter.