**Physics 260 – Section 0401, 0402, and 0403 Fall 2012**

**General Physics: Vibrations, Waves, Heat, Electricity and Magnetism**

**Instructor:**

T.R. Kirkpatrick

Office: IPST Building, Room 1110

(301)405-4801

[tedkirkp@umd.edu](mailto:tedkirkp@umd.edu)

**TEXT**: Physics for Scientist and Engineers (Second Edition) - A Strategic Approach by Randall D. Knight.

**CLASS MEETINGS:**

|  |  |  |
| --- | --- | --- |
|  | **Time** | **Location** |
| Lecture: | MW: 7:00-8:15pm | Phys 1410 |

**OFFICE HOURS:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Email** | **Place** | **Phone** | **Time** |
| Prof. Kirkpatrick | [tedkirkp@umd.edu](mailto:tedkirkp@umd.edu) | IPST-1110 | 301-405-4801 | W:2:00pm-3:30pm |

You may also meet with the instructor appointment.

**ELECTRONIC CALCULATORS:**

The homework and exam problems require an electronic calculator with scientific functions: trig, log, exponential and arbitrary roots and powers.

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**HOMEWORK**

The weekly homework problem sets, and their due dates, are shown on the homework assignments page. Problem sets are to be handed in at the start of your discussion section of the week shown. Late homework may be accepted up to ne day late at the discretion of the teaching assistants. The homework problems are an essential part of the course: the exams in the course will test your ability to solve problems of the type given in the homework. For grading, several homework problems will be selected at random from each set turned in. Your course homework score will be based on the number of solutions submitted (2/3) and the grade for the problem (1/3).

**EXAMS**

There will be 3 exams given during the lecture period on the dates shown in the attached schedule. *All exams are closed-book exams*. In computing your course grade, the lowest score of the three in-class exams will be dropped. The final exam will be based on the entire semester’s work; the material covered in the in-class exams is indicated on the schedule. Make-up exams will not be given.

**QUIZZES**

Starting the week of September 13, a 10-min quiz will be given during recitation every week except those weeks in which hour exams are scheduled. Each quiz will consist of a slightly revised problem from the homework due the previous week. Make-up quizzes will not be given; however, your lowest two-quiz scores will be dropped.

**LABORATORY**

Physics 261 is the laboratory part of Physics 260 and meets in room 3719 or 3310. This course carries one credit and the grade is folded in with the Physics 260 course grade. You must pass Physics 261 in order to pass the entire course. If you do not pass this part of the course you will be required to repeat the entire course. The labs meet for three hours a week. You must complete all of the labs, including the culminating labs in order to pass the course. You are expected to attend each class and will be allowed to make up labs only under exceptional circumstances. For more information on the laboratory portion of this course, consult the course with page, or contact the instructors listed in the Schedule of Classes. If you have already taken Physics 261 and want that to count for this semester’s course, go to the Student Services Office, 1120 ask that they officially report the grade to the instructor.

**GRADE**

The course grade will be based on homework, in-class exams, the final exam and the laboratory weighted roughly as follows:

2-highest in-class exams: 35%

Quizzes (best 10) 5%

Homework (best 10) 10%

Final Exam: 25%

Laboratory 25%

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**LECTURE AND EXAM SCHEDULE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Day** | **Date** | **Lecture will cover chapters** | **Notes** |
| Wednesday | August 29, 2012 | Chapter 14 |  |
| Wednesday | September 5, 2012 | Chapter 14 |  |
| Monday | September 10, 2012 | Chapter 15 |  |
| Wednesday | September 12, 2012 | Chapter 15 |  |
| Monday | September 17, 2012 | Chapter 16 |  |
| Wednesday | September 19, 2012 | Chapter 16 |  |
| Monday | September 24, 2012 | Chapter 17 |  |
| Wednesday | September 26, 2012 | Chapter 17 |  |
| Monday | October 1, 2012 | Review |  |
| Wednesday | **October 3, 2012** | **Exam #1** | **Chapters 14-17** |
| Monday | October 8, 2012 | **Chapter 20** |  |
| Wednesday | October 10, 2012 | Chapter 21 |  |
| Monday | October 15, 2012 | Chapter 21 |  |
| Wednesday | October 17, 2012 | Chapter 26 |  |
| Monday | October 22, 2012 | Chapter 26 |  |
| Wednesday | October 24, 2012 | Chapter 27 |  |
| Monday | October 29, 2012 | Chapter 27 |  |
| Wednesday | October 31, 2012 | Chapter 28 |  |
| Monday | November 5, 2012 | **Review** |  |
| Wednesday | November 7, 2012 | Exam #2 | Chapters20, 21,  26,27 |
| Monday | November 12, 2012 | Chapter 29 |  |
| Wednesday | November 14, 2012 | Chapter 29 |  |
| Monday | November 19, 2012 | Chapter 30 |  |
| Monday | November 26, 2012 | Chapter 30 |  |
| Wednesday | November 28, 2012 | Chapter 31 |  |
| Monday | December 3, 2012 | Chapter 31 |  |
| Wednesday | December 5, 2012 | **REVIEW** |  |
| Monday | December 10, 2012 | **EXAM #3** | **Chapters 28-31** |

**HOMEWORK ASSIGNMENTS**

|  |  |  |
| --- | --- | --- |
| **Week Number** | **Homework**  **Due Week Of** | **Problems** |
| 3 | September 10, 2012 | Chapter 14: 3,8,15,21,30,49,54,69 |
| 4 | September 17, 2012 | Chapter 15:  4,7,19,22,23,33,40 |
| 5 | September 24, 2012 | Chapter 16:  2,5,6,17,21,27,31,46,51 |
| 6 | October 1, 2012 | Chapter 17:  1,2,5,10,15,26,33,41,50 |
| 7 | October 8, 2012 | Chapter 20:  3,9,10,18,20,25,28,37,41,50 |
| 8 | October 15, 2012 | Chapter 21:  3,8,20,33,38,48,60 |
| 9 | October 22, 2012 | Chapter 26:  7,9,10,14,15,22,25,28,29,41 |
| 10 | October 29, 2012 | Chapter 27:  1,3,8,12,18,22,28,32,54 |
| 11 | November 5, 2012 | Chapter 28:  1,3,4,12,21,40,48,56 |
| 12 | November 12, 2012 | Chapter 29:  1,5,8,15,21,24,26,34,45 |
| 13 | November 19, 2012 | Chapter 30:  1,2,6,12,17,29,30,34,42,60 |
| 14 | November 26, 2012 | Chapter 31:  1,5,10,16,22,32,37,40,46 |
| 15 | December 3, 2012 | NO HOMEWORK DUE |

**FINAL EXAM: FRIDAY , DECEMBER 14, 2012 - 6:30pm – 8:30pm**