

# Physics 6A Summer 2015

**Lectures:** MWF 12:30-1:40pm, Thimann Lecture 003

**Instructor:** Amy Furniss, 318 Natural Sciences II, afurniss@ucsc.edu

**Office Hours:** MWF 2:00-3:00 pm - these will be in ISB 235 - not my office

Required materials for 6A and 6L:

- (1) University Physics by Young and Freedman
- (2) A non-graphical calculator for use during midterm and final**
- (3) Physics 6L Lab Manual (available at Bay Tree)
- (4) Special blank laboratory notebook for 6L (available at Bay Tree)

Course grading:

- |                   |     |
|-------------------|-----|
| (1) In-class Work | 5%  |
| (2) Homework      | 25% |
| (3) Midterm       | 35% |
| (4) Final         | 35% |

## Course Exam and Review Timeline:

Date	Details	Notes
Monday, July 20th	Midterm Review	In class
Wednesday, July 22nd	Midterm	Chapters 1-7
Wednesday, August 26th	Final Exam Review	In class
Friday, August 28th	Final	Chapters 8-11, 13, 14

## Important Dates:

Drop Deadline - July 6

Withdraw Deadline - July 31

## Homework:

Written homework is due each week (see assignment schedule below). **Late homework is not accepted.** Assignments will be posted on eCommons *at least* one week preceding the due date. Each assignment will include 11 problems. Of the 11 problems, one will be chosen *at random* and graded thoroughly. The other 10 problems will be given credit based on a complete problem setup.

Homework Number	Date Assigned	Date Due	Content
Homework 1	06/22/15	06/29/15	Units, Physical Quantities, Vectors, Motion Along a straight Line (Ch. 1 and 2)
Homework 2	06/29/15	07/06/15	Motion in Two Dimensions, Newton's Laws of Motion (Ch. 3 & 4)
Homework 3	07/06/15	07/13/15	Applying Newton's Laws, Work and Kinetic Energy (Ch. 5 and 6)
Homework 4	07/13/15	07/20/15	Potential Energy and Energy Conservation (Ch. 7)
Homework 5	07/27/15	08/3/15	Momentum, Impulse and Collisions, Rotation of Rigid Bodies (Ch 8 and 9) + Gravitation (Chapter 13)
Homework 6	08/3/15	08/10/15	Dynamics of Rotational Motion (Ch 10)
Homework 7	08/10/15	08/19/15	Equilibrium (Ch 11)
Homework 8	08/19/15	08/26/15	Periodic Motion (Ch 14)

### **Discussion Sections:**

Discussion section attendance is not required. However, regular attendance to discussion sections can help students succeed in 6A. There will be four separate discussion sections offered each week.

Stephen Martin: Thursday 1-2:30pm (location TBD)

Ross Greenwood: Wednesday 3-4:30pm (location TBD)

Trevor Keiber: Tuesday 1-2:30pm (location TBD)

David Jenkins: Tuesday 11:30am-1pm (location TBD)

### **Modified Supplemental Instructions:**

In addition to discussion sections, we also have support from the MSI program on campus. The MSI tutor, Nina Sardesh ([nsardesh@ucsc.edu](mailto:nsardesh@ucsc.edu)), will be scheduling her sessions on the first day of class. I encourage you to take advantage of MSI discussion sessions, particularly if you find you are having trouble in the course.

### **Midterm and final exams:**

The midterm and final exams will be comprised of 40% homework problems, 40% of problems covered in class and 20% of "new" problems which have not yet been directly covered. Although the problems will be similar to those covered in class, they will not be exactly the same. Small modifications will be made such that if the physics behind the problem is understood, the problem will be straight forward. A list of useful equations and constants will be provided for using during the exam, and is already available for reference on commons.

### **Lab course (6L):**

The lab course is graded and passed separately from 6A, although 6A and 6L are designed to work together. Read through the experiment before lab. If you miss one lab, you cannot get a grade higher than a B for 6L. If you miss two labs, you will fail 6L and will have to take it again. If you know in advance that you will miss a lab, arrange to make it up in another section with your lab instructor. 6L labs occur weekly, starting the week of July 6th.

### **Succeeding in 6A:**

Expect to study *more* than 10 hours per week outside the classroom/lab each week. Read, do your homework and work with others on understanding the concepts presented in the class. Please take advantage of my office hours and/or the TA's discussion sections. Look for help early if you are getting worried, your grade is determined entirely on the numerical scores, so there is nothing we can do to change it after the fact. Although I will post the slides used during a lecture at the end of each week, I warn you that these slides will lack a significant portion of lecture content. I will rarely use slides to introduce material, work through example problems or summarize concepts. **Attend class. Take notes. Ask questions.**

### **Summer Session Students with Disabilities:**

If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me as soon as possible, preferably within the first week of the Summer Session. Contact DRC by phone at 831-459-2089 or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu) for more information.

### **Academic Dishonesty Policy:**

I am helpful and easygoing when approached for help, but I am ruthless in cases of academic dishonesty. Every quarter, someone gets caught cheating and flunks the course. The rules are very clear: Use in any exam of any aid not specifically allowed. This includes notes, copying, or help from another person during exams. Any cheating will result either in an F in the entire course or a D grade with a statement in your evaluation that the grade was due to cheating, at my discretion. The latter is worse, you do not want a statement of cheating to be read by every school and employer for the rest of your career. You are encouraged to work in groups while discussing how to do the homework, however, we require that you work alone when working the problems for your final answers. Violation of these rules, or any other misuse of the assignments, will be considered academic dishonesty and will result in penalties up to failing the course. These penalties are in addition to any administrative penalties from your college, such as expulsion, and are subject to the usual campus procedure.