

**PHYS 1000****Dave Letterman Physics****Spring 2017**

**Instructor:** Dr. Michael J. Bozack, 217 Leach Science Center, 844-4363  
**Email:** bozacmj@auburn.edu  
**Text:** *Conceptual Physics*, Paul Hewitt, 9th ed; *Lecture Notes* (Sofy Copy Center);  
**Meetings:** MWF 10-10:50 am (bring early lunch snacks)

| Week              | Lecture                          | Material                             | Exercises                                                       | Tests             |
|-------------------|----------------------------------|--------------------------------------|-----------------------------------------------------------------|-------------------|
| 1<br>1/6 - 1/10   | Ch. 2                            | Newton's First Law                   | 2:6,11,13,17,22,29,33,38                                        |                   |
| 2<br>1/13 - 1/17  | Ch. 3<br>Ch. 4                   | Linear Motion<br>Newton's Second Law | 3:4,7,11,13,20,29,P4,P9<br>4:4,9,19,24,29,33,42,P3,P6           |                   |
| 3<br>1/20 - 1/24  | Ch. 5                            | Newton's Third Law                   | 5:2,7,13,17,27,32,P1,P4                                         |                   |
| 4<br>1/27 - 1/31  | Ch. 6                            | Momentum                             | 6:2,5,10,14,27,29,39,P1,P3,P6                                   | Exam 1<br>F, 1/31 |
| 5<br>2/3 - 2/7    | Ch. 7                            | Energy                               | 7:9,14,19,22,24,40,44,P2,P4                                     |                   |
| 6<br>2/10 - 2/14  | Ch. 11                           | Atomic Nature                        | 11:3,13,19,22,25,32,33;P1,P8                                    |                   |
| 7<br>2/17 - 2/21  | Ch. 12                           | Solids                               | 12:4,8,11,13,18,24,36,P5                                        | Exam 2<br>F, 2/21 |
| 8<br>2/24 - 2/28  | Ch. 13                           | Liquids                              | 13:7,12,15,18,20,35,42,P8                                       |                   |
| 9<br>3/3 - 3/7    | Ch. 14                           | Gases and Plasmas                    | 14:23,24,30,33,40,42,48,P7                                      |                   |
| 10<br>3/10 - 3/14 | Ch. 15<br>Ch. 16                 | Temperature<br>Heat Transfer         | 15:3,13,14,18,20,23,25,P2,P4<br>16:4,8,19,22,26,P2,P3           | Exam 3<br>F, 3/14 |
| 11<br>3/17 - 3/21 | Ch. 17<br>Ch. 22                 | Change of Phase<br>Electrostatics    | 17:7,11,21,27,29,32,34,40,P1,P7<br>22:3,11,15,16,18,22,P1,P2,P3 |                   |
| 12<br>3/24 - 3/28 | <b>Wild on Panama City Beach</b> |                                      |                                                                 |                   |
| 13<br>3/31 - 4/4  | Ch. 23                           | Electric Current                     | 23:7,9,11,13,14,20,25;P4,P7                                     |                   |
| 14<br>4/7 - 4/11  | Ch. 24                           | Magnetism                            | 24:5,8,10,15,21,27,36                                           | Exam 4<br>F, 4/11 |
| 15<br>4/14 - 4/18 | Ch. 26                           | Properties of Light                  | 26:6,16,21,22,24,26,29;P3,P4,P5                                 |                   |
| 16<br>4/21 - 4/30 | Ch. 33                           | Radioactivity                        | 33:2,4,5,11,18,23,28;P2,P3                                      |                   |

**Final Exam** (comprehensive): Tuesday, May 6, 11-1:30 p.m.

**Grading:** The final grade will be determined by the following scheme.

|                |      |
|----------------|------|
| Exams (Best 3) | 45%  |
| Final Exam     | 30%  |
| Lab            | 15%  |
| Homework       | 10%  |
| Total          | 100% |

PS 1000 is **not** graded on an absolute grading system (e.g., 90-100% = A etc) but rather on a relative (curved) system, where performance is compared to other students in the course based on the class average. After each test I post a scale of scores vs letter grade so each student knows what a score of say, 68, on a test means in terms of a letter grade. This enables you to know how you are doing in the course. For the final course grade, I apply the weighting factors above to each grade component, drop your lowest test score, and generate a total raw score for each student that is compared to the class average raw score. The calculation is completely based on numbers and there is no bias. Exams will cover material covered in class, lab, and homework.

**Homework:** Homework is to be neatly written and presented in an organized manner. Sentences or phrases are to be used to describe what you are doing. Having the right answer is not sufficient. No words, no credit. It is due at the beginning of class on the day assigned. The first page should have your full name written neatly in the upper right-hand corner. Each subsequent page should have your initials in the upper right-hand corner and stapled if possible. **No late homework will be accepted.**

**Attendance Bonus:** I will take attendance five times during the semester (on dates chosen randomly). If you are in attendance at least 4 of 5 times, and your final grade turns out to be within two students of the borderline between two grades, I will give you the *higher* grade.

**Excused Absences:** **Under no circumstances** will makeup exams be given, as the course enrollment is too big. If you miss a test for any reason, you must have a legitimate, verifiable excused absence, and the final exam score will be used for the score on that test.

**Office Hours:** Anytime. Just drop by or make an appointment.

**Laboratory:** We have a set of new labs this year that are geared toward PHYS 1000. The Lab Packet for the course will be emailed to you during the first week of labs. The lab schedule and room numbers (usually Parker 108) will be listed outside the Physics Lab Office on the first floor of Parker Hall as well as in a handout that will be distributed.

**Lab Schedule:**

Lab Section 001 meets Tuesday, 4-6 pm  
Lab Section 002 meets Thursday, 4-6 pm  
Lab Section 003 meets Tuesday, 6-8 pm  
Lab Section 004 meets Thursday, 6-8 pm

**Frequently Heard Comments:**

- Is this on the test? Answer: yes.
- The questions on the test are not like those in the homework. Response: To the extent that you understand the concepts of physics, you will realize that they are more closely related than you might have thought. Also, they are not supposed to be the same questions.
- I studied, read the book, read the notes, did the homework, came to class, and understood the labs, yet I'm still not doing well in the course. Response: If that is true, there is something wrong with the way you are approaching this class. Please come and see me early in the semester so we can attempt to fix the situation. Don't wait too long to ask for help.