

PHYSICS 251 Spring 2008 Syllabus

Instructor: Dr. Darin Zimmerman
Office: 106 Science
Office Hours: MWF 11 – 11:50am, or by appointment
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Meeting Time / Place: MWF, 12:00 – 12:50 p / 109 Holtzinger (Lecture)
F, 1:00 – 2:50p (Sec 1); 3 – 4:50p (Sec 2) / 204 Holtzinger (Lab)

Textbook: *Core Concepts in College Physics* by Darin T. Zimmerman

Course Description: This is an introductory course in physics without calculus (you should be familiar with algebra and trigonometry up to pre-calculus). We will survey topics in electricity, magnetism, circuits, electromagnetic waves, geometrical and wave optics, and modern physics.

Grade Weighting: Quiz (20%) + Lab (20%) + Exam 1 (15%) + Exam 2 (15%) + Exam 3 (15%) + Final Exam (15%)

Letter Grades: Exam scores will be curved and averaged with the other areas and compared to this scale:
A (94-100), A- (90-94), B+ (87-90), B (83-87), B- (80-83), C+ (75-80), C (70-75), D (60-70), F (<60)

Quizzes: In lieu of having you turn in homework for a grade, we will have 9 chapter quizzes. Each quiz will be similar to the previously assigned homework problems. I don't give make up quizzes; however I will drop your two lowest quizzes so use these two "free" quizzes wisely.

Homework: Homework will be assigned but not turned in for a grade (see above). Although the homework is not graded, I *strongly* suggest you work hard at completing it since the quizzes are similar to the homework.

Labs: You must attend the labs and you must pass the lab (60% or better) to pass the class.

Exams: Exam problems will be similar to the homework problems. Each exam will consist of a conceptual part and a problem solving part with 3 to 6 problems each. The Final Exam will be cumulative. *There will be no make-up exams except in very exceptional cases (death in the family, hospital admittance, etc.)*

Academic Integrity: Cases of academic dishonesty (cheating, plagiarism, fraud, etc.) will be dealt with harshly. Consequences for such behavior may include receiving a failing grade on the exam or in the course and in more serious cases, permanent expulsion from the University. For the details, see *The Student Guide to University Policies and Rules*.

Class Cancellation: In the event that snow or other inclement weather forces a delay or a closing of the campus, class may be cancelled. If this happens you may call my voicemail number above and I will inform you as to whether or not class is indeed cancelled.

Comments: Traditionally, a course in physics may be the most difficult subject you encounter in your college career. At the same time it can be one of the most interesting (even if you're not a physics major). One key to your success will be to complete all of the assigned homework. Just as with any acquired skill, practice will sharpen your ability to solve the problems.

My mission is to facilitate your learning and provide you with the tools to complete the work. I will try to provide you with an underlying motivation for the topics we are studying that will make the course more interesting and enjoyable for you. I make myself available for help so you should not hesitate to come to my office when you are struggling (come by even if you're not struggling!). You should feel free to approach me with questions and problems - no matter how "stupid" or "simple" you think they might seem. Remember: "The leisure of today is the toil of tomorrow" – Prof. Gary Weisel.

Physics 251 Spring 2008 Class Schedule (Subject to change...so make sure you come to class!)

Week	Date	Day	Chapter (topics)	Homework
1	January 14 16 18	M W F	16 (Electric charge, fields, and force)	16 (1, 3, 4, 5, 7 – 10, 13, 14, 18, 21, 23)
2	21 23 25	M W F	<i>Dr. Martin Luther King, Jr. Day, no classes</i> 17 (Electric potential) / Ch. 16 Quiz (in lab)	17 (2, 5, 7, 8, 12, 13, 15, 16 – 22)
3	28 30 February 1	M W F	Ch. 17 Quiz (in lab)	
4	4 6 8	M W F	18 (Electric current & DC circuits)	18 (1, 3, 5, 6 – 14, 19 – 24, 27 – 29)
5	11 13 15	M W F	Ch. 18 Quiz EXAM 1: Ch. 16 – 18 (in lab)	
6	18 20 22	M W F	19 (Magnetic forces and fields)	19 (1 – 16, 19, 20)
7	25 27 29	M W F	20 (Electromagnetic induction) Ch. 19 Quiz (in lab)	20 (1 – 13, 14, 15, 18 – 21, 25 – 27)
8	March 3 5 7	M W F	21 (AC circuits) Ch. 20 Quiz (in lab)	21 (1 – 7)
9	10 12 14	M W F	<i>Spring Break</i> <i>Spring Break</i> <i>Spring Break</i>	
10	17 19 21	M W F	22 (Electromagnetic waves: light) Ch. 21 Quiz	22 (1 – 12, 16, 17, 22, 23)
11	24 26 28	M W F	EXAM 2: Ch. 19 – 22 (in lab)	
12	31 April 2 4	M W F	23 (Reflection & Refraction)	23 (1 – 11, 16 – 18)
13	7 9 11	M W F	24 (Mirrors & Lenses) Ch. 23 Quiz (in lab) / <i>Late Drop Deadline</i>	24 (1 – 10, 14 – 17, 19)
14	14 16 18	M W F	25 (Interference) Ch. 24 Quiz (in lab)	25 (1, 3, 5, 7, 8, 11 – 13, 15, 17, 20)
15	21 23 25	M W F	26 (Einstein's Theory of Special Relativity) EXAM 3: Ch. 23 - 25 (in lab)	26 (TBA)
16	28 30 May 2	M W F	27 (The Quantum View of Nature) <i>Review for Final; Ch. 25 Quiz</i> (both in lab)	27 (1, 2, 4, 7, 9, 11, 12, 15, 17, 19, 21 – 24)
17	5 6 7 9	M T W F	FINAL EXAM (8 – 9:50am) / 109 HOLT	