

FLORIDA INTERNATIONAL UNIVERSITY
Department of Physics
Schedule for Physics with Calculus II– Fall, 2009

Instructor: Dr. Richard A. Bone

Below are the chapter-sections from "University Physics", 12th edition by Young & Freedman to be covered during this course. *(If you already have a different calculus-based book, you are not required to buy Young and Freedman. However you will need to order "Mastering Physics" (~\$40). See below.)* In order to get the most out of this course, read the relevant sections for the classroom session you have just attended and upgrade and clarify your lecture notes accordingly. Gaining conceptual understanding of physics is of the utmost importance.

Homework We will be using the Web-based homework system, "Mastering Physics", that is included with your purchase of Young and Freedman. You will need to register by going to www.masteringphysics.com and selecting Young/Freedman's University Physics, 12/e. *(If you are using a different book, you will need to purchase Mastering Physics which you can do via the same website)* During registration, you must enter the course ID, which is MPBONE19. Further details will be given in the first class, and/or in an update of this Schedule.

Assistance Individual assistance with any aspect of this course will be available during my office hours which, generally, will be Monday through Friday, 9:30 a.m. to 12:00 pm. I will be in my office (CP 213) or my lab (CP 276). Complete solutions to problems will be posted on my website – www.fiu.edu/~bone/ (user name and password will be provided in class). There is also a problem-solving class, PHZ 2103, which accompanies PHY 2049. It is scheduled on Tuesdays, 9:30 to 10:20 a.m. or Wednesdays, 1:00 to 1:50 p.m.

This is a 4 credit course. You should therefore schedule at least 8 hours per week for homework and self-study outside the classroom.

The final exam will contain 2 sections, one covering coursework since EXAM 2, the other on earlier material. The relative weighting of the 3 exams, post-assessment test and homework will be as follows: HOMEWORK - 12%, POST-ASSESSMENT TEST - 2%, EXAMS 1 and 2 - 25% each, FINAL EXAM - 36%

Your overall score will be converted to a letter grade according to the following approximate scheme: >85% = A, A-; 75-84% = B+, B, B-; 58-74% = C+, C

Make-up exams and/or incompletes will only be given in extreme cases involving serious medical problems, death in family, etc, not because your car breaks down, or you are not prepared for the exam, or you have a work/vacation conflict. Written verification will be required. Any make-up exams will be scheduled for after the final, assuming you get passing grades on the other exams.

Student Learning Outcome The successful student will be one who has developed a strong, conceptual understanding of the classical electromagnetism and optics described in the reading assignments below. A strong conceptual understanding is gained through regular, on-time class attendance, questioning your instructor in class and during office hours, and paying particular attention to homework. Confidence that you have a deep understanding of physics is achieved through homework problem-solving. Always work from first principles. There are so few of these principles that there's not much to memorize. If you find yourself simply hunting for an equation that contains the variables in the problem, you will likely fail the exams. The successful student will be one who, confronted with an original problem, is able to apply the basic laws of physics in order to find a solution. Do not make use of unscrupulous websites that sell solutions and leave you unprepared for exams.

The following policies allow for your full and undistracted attention during class time.

Cell phone policy Cell phones must be switched off during class. Texting or leaving class to make or receive calls is not permitted.

Laptop policy Laptops are not suitable for note-taking in physics, and should be closed.

<u>Date</u>	<u>Week</u>	<u>Reading assignments</u>
Aug 24	1	21-1,2,3,4
Aug 26		
Aug 28		Pre-assessment test
Aug 31	2	21-5,6,7; 22-1,2,3,
Sept 2		
Sept 4		
Sept 9	3	22-4,5; 23-1
Sept 10		
Sept 14	4	23-2,3,4,5; 24-1,2
Sept 16		
Sept 18		
Sept 21	5	24-3,4; 25-1,2,3,4
Sept 23		
Sept 25		
Sept 28	6	Exam 1 (Tentatively covering 21-1 through 24-4)
Sept 30		25-5; 26-1
Oct 2		
Oct 5	7	26-2,4; 27-1,2,3,4
Oct 7		
Oct 9		
Oct 12	8	27-5,6,7; 28-1,2,3
Oct 14		
Oct 16		Oct 16 is deadline for DR/WI
Oct 19	9	28-4,5,6,7; 29-1,2
Oct 21		
Oct 23		
Oct 26	10	Exam 2 (Tentatively covering 25-1 through 28-7)
Oct 28		29-3,4
Oct 30		
Nov 2	11	29-5,7; 30-1,2,3,4
Nov 4		
Nov 6		
Nov 9	12	30-5; 31-1,2,3
Nov 13		
Nov 16	13	31-4,5; 32-1; 33-1,2,3
Nov 18		
Nov 20		
Nov 23	14	34-1,2,3,4,7
Nov 25		Post-assessment test
Nov 30	15	34-8; 35-1,2,4
Dec 2		
Dec 4		
Dec 7	16	FINAL EXAM (12:00 - 2:00 p.m.)