

**FLORIDA INTERNATIONAL UNIVERSITY**  
**Department of Physics**

Schedule for Intermediate Electromagnetism II - Spring, 2018

Instructor Dr. Richard A. Bone

Below are the chapter-sections corresponding to each lecture from Electromagnetic Fields, 2nd edition by Wangsness. Some will be covered in greater depth than others. They represent your reading assignments and should be used to complement and upgrade your lecture notes. You have already proven your ability to handle physics and you know that completing exercises plays a crucial role. Homework exercises will be assigned in class and collected for grading one week later. **Preparedness for exams is contingent on doing all the assigned problems.** Individual assistance will be available during office hours which, generally, will be Monday, Wednesday and Friday from 9:30 a.m. to 12:00 noon, and Tuesday, Thursday from 1:30 to 4:30 p.m. You should find me in my office CP 213 or lab CP 276.

**This is a 3 credit course. You should therefore schedule at least 6 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 and homework will be as follows:

HOMEWORK - 10%, EXAMS 1, 2 and 3 - 30% each

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** Our technologically dependent world requires an understanding of the processes that led us here. Learning the basic concepts and ideas of scientific fields provides contact with not just those fields but with how science is done. In these courses students study the scientific method through examination of the foundational theories of modern scientific thought. Students apply scientific principles and theories to problem solving, evaluate scientific statements, and incorporate new information within the context of what is already known. Emphasizing the essential connection between theory and experiment, the hands-on laboratory experience provides the context for testing scientific theories.

The successful student will be one who has developed a strong, conceptual understanding of the material 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, your conceptual understanding is missing. 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 websites that provide solutions as this will leave you unprepared for exams.

The following policies allow for your full and undistracted attention during class time. **Cell phone policy** Cell phones should be switched off during class. Texting or leaving class to make or receive calls is disrupting.

<u>Date</u>	<u>Chapter-section</u>		
Jan	8	12-1,2,3,4	
	10	13-1,2,3	
	17	14-1,2,3,4,5	
	22	15-1,2	
	24	16-1,2,3	
	29	16-4,5	
	31	17-1,2,3	
	Feb	5	17-4
7		<b>EXAM 1</b>	
12		18-1,2	
14		18-3	
19		19-1,2	
21		19-3,4	
26		20-1,2	
28		20-3,4	
Mar	5	20-4,5	
	7	20-5,6	
	19	<b>EXAM 2</b>	<b>Mar 19 is deadline for DR/WI</b>
	21	21-1	
	26	21-2,3,4	
	28	24-1,2	
Apr	2	24-2,3	
	4	24-3,5	
	9	24-6,7	
	11	25-1,2,3	
	16	25-4,5	
	18		
	25	<b>FINAL EXAM</b>	<b>12:00 pm to 2:00 pm</b>