

Physics 368, Electromagnetism I, Winter 2006

Lecture location/time: CF 314, 3pm MWF
Instructor: Milton From
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Reference Materials: The main text for the course is *Introduction to Electrodynamics* by David J. Griffiths (3rd edition). The WWU library has a large number of other useful texts on this subject. These may be found in the section QC670 in Wilson 4W. Griffiths' text does a nice job of reviewing the vector calculus that we'll need. However if you'd like a slightly more in depth review with some example problems I recommend the book *Div, Grad, Curl, and all that* by H. M. Schey. The WWU library also has a large number of vector calculus texts in the section QA261 in Wilson 4W. The course website includes links to the course syllabus, weekly assignment listings, and assignment and test solutions. We will occasionally make use of *Maple* symbolic algebra software in class and in assignments. Please familiarize yourself with this software if you have not already used it in previous courses.

Approximate Schedule (Last revision: 4 Jan 2006):

Week	Dates	Text chapters	Assignments		Tests
			Questions	Solutions	
1	Jan 4-6	1	1	1	
2	Jan 9-13	2	2	2	
3	Jan 18-20 (Monday holiday)	3	3	3	
4	Jan 23-27	3, 4	4	4	Monday Jan 23
5	Jan 30 - Feb 3	4	5	5	
6	Feb 6-10	5	6	6	
7	Feb 13-17	5, 6	7	7	Monday Feb 13
8	Feb 20-24 (Monday holiday)	6, 7	8	8	
9	Feb 27-Mar 3	7	9	9	
Review assignment is due on Friday, March 3, 5pm					
10	Mar 6-10	7	10	10	
	Wednesday Mar 15, 3:30-5:30				Final Exam

Homework: There will be an assignment of 8-10 problems each week. Assignments will *not* be graded however it is extremely important that you do them. Many of the problems on course tests will be similar to those on the assignments. Assignment solutions will be posted on my webpage. I encourage you to work with other students on the assignment problems. However please write up your own final solutions independently. Please come see me if you need hints or clarification on points in my solutions.

Tests: There will be two one-hour tests, and a final two-hour cumulative exam. You may use the text as well as one mathematics reference book of your choice during the tests. No other reference materials will be allowed.

Quizzes: There will be at least ten short (5 minute) quizzes given at random points throughout the course. These will be closely related to the previous few days' lectures or to the previous week's assignment.

Review Assignment: This will be an assignment with long answer questions from each of the chapters covered in the course. *It will include several questions requiring the use of Maple or equivalent computer algebra software.*

Grades:

Quizzes	20% (average of best 8)
2 Tests	50% (25% each)
Review assignment	10%
Final Exam	20%

LETTER GRADE SCALE

Percentage	90-100	85-89	80-84	77-79	73-76	70-72	67-69	63-66	60-62	57-59	53-56	<53
Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F