

## ***Course Description & General Information***

### **Instructors:**

Prof. Dipanjan Mitra, A517 Cook Bldg.; tel. 656-????  
Office hours: Tu 4-5 pm  
Prof. Joanna Rankin, A538 Cook Bldg.; tel. 656-0051  
Office hours: W 2-3 pm

### **Lectures:**

Mondays, Wednesdays & Fridays 1:10-2:00 pm in A402 Cook Building

### **Textbook:**

*Introduction to Electrodynamics*, by David J. Griffiths (3rd ed., 1999, Addison Wesley)  
For sale by the UVM Bookstore as well as various on-line booksellers

### **Topics:**

Electrostatics, Electric Fields in Matter, Magnetostatics, Magnetic Fields in Matter, Maxwell's equations and Electromagnetic Waves.

### **Other Books on the Subject (not required)**

(1.) "The Feynman Lectures on Physics," Vol. II, by R.P. Feynman, R.B. Leighton, and M. Sands, (Addison-Wesley) An undergraduate text based on Feynman's lectures, universally praised for their originality. Vol. II covers electromagnetism.

(2.) "Classical Electrodynamics," by J. D. Jackson, (3rd edition, 1999, Wiley).

### **Reading Assignments:**

The course will cover Griffiths Chapters 1-7 and 9. Students are strongly encouraged to read the relevant sections of the text before coming to class meetings.

### **Homework:**

Problem sets will be handed out in class about weekly, usually due the following Friday. The goal of homework is for you to convince us that you understand the material and have gained mastery of the concepts and techniques. *Please write your solution as neatly as possible.* Please limit your collaboration with fellow students to general procedures about strategies for solving a problem, rather than the solution itself. When all the homework has been received, the instructors will correct and return it promptly. Late problem sets will be downgraded and will delay their correction and return. Homework will comprise 35% of the final course grade.

### **Exams:**

There will be two hour exams as well as a final exam. The hour exams will count for 15% of the course grade each and the final exam 25%. Absence from an exam must be arranged with the instructors well in advance.

### **Attendance:**

Regular class attendance is expected. Any absence will be highly visible, since the class is small. Generally, after several absences we will start thinking that you might not be able to finish successfully (please consult with us.) Attendance constitutes 10% of your grade.