Exam 2 Information

Exam 2 will take place on Thursday April 19 from 7:30-9:30 pm.

The Friday classes on April 20 are cancelled because of the evening exam.

Exam 2 Room Assignments:

L01 in 34-101  
L02 in 50-340 (Walker)  
L03 in 50-340 (Walker)  
L04 in 50-340 (Walker)  
L05 in 26-100  
L06 in 26-100  
L07 in 6-120  
L08 in 34-101  

Conflict Exam 2 will be held Friday April 20 from 8-10 am in 36-156 and from 9-11 am in 34-101

If you have an academic conflict or a regular scheduled activity like MITSO, please fill out the online google form at

https://docs.google.com/forms/d/e/1FAIpQLSeIq2YVhezKUCYlkXQoz8CsnBJ6bMYo6UCNFspXXASmUKL8aw/viewform?usp=sf_link

Note that job conflicts are not considered academic activities and you should reschedule your work to avoid a test conflict.

Please describe the conflict and indicate which of the times you would like to take the conflict exam.

If you are not at MIT on Thursday or Friday, please describe the event and when you will be back on campus.

If you have any additional special requests please indicate those as well.

Exam Preparation: To study for this exam, we suggest that you review pre-class reading questions, in-class problems, in-class concept questions, Friday problem solving sessions, problem sets, relevant parts of the study guide, class notes, and work through past exams.
Exam 2 Topics: The exam format will consist of three analytic problems and five conceptual questions drawn from the following topics:

1. Dielectrics
2. Current, resistance, and Ohm’s Law
3. Magnetic field
4. Magnetic force on moving charges and current carrying wires in external magnetic fields
5. Magnetic dipole moment vector
6. Torque and force on a magnetic dipole in an external magnetic field
7. Biot-Savart law
8. Ampere’s Law
9. Faraday’s Law
10. Mutual and self-induction
11. Energy stored in magnetic fields

Study Guide: For each of these topics, we suggest you write up a study guide that consists of three sections

Part 1: Conceptual Explanation of Key Concepts. You may want to print up Concept Questions from Class or Old Exams and add them here.

Part II: A summary of methodological approaches to problem solving. Many students do not apply enough detail and hence make errors on exam questions even though they have understood the concept. Applying the concept is much harder and you need to be very careful. You can compare your summaries with problem set solutions and in-class problem solutions to see if your summary is comprehensive enough.

Part III: Write up a set of solutions to problems that illustrate all the basic cases. You can draw from the in-class problems, and the problem sets. This part is critical. If you have enough examples that cover the concept, then when taking practice tests you have a basis of knowledge to draw on.

Attending Class: Please keep in mind that coming to class is the single most important thing you can do. Please carefully read and then answer the Reading Questions for each class. Don’t just search for the answers or ask your friends. Preparing for class is a crucial piece of time management. If you do prepare, your learning will be much more efficient and you will save valuable time.

Good Problem Set Habits: The problems sets are a crucial part of the course. I strongly encourage you to start the problem set early, and try it on your own before you talk to your peers or ask for help. This will especially help time management and you will discover that by starting the problem set early you will get more out of class.

Reviewing Solutions: You should print up and review solutions to all the in-class problems and problem sets!
Additional Resources

Go to anyone's office hours (see website for times)
Go to Sunday tutoring in 26-152