

Lecture 22

Pre-Lecture Preparation (due within the first 5 minutes of class):

- Read pages 915 – 918 in the textbook (Serway 9th edition) and do the following:
 - 1) Quick Quizzes: 30.5
 - 2) Book Objective Questions (p. 923): 1 and 12
 - 3) Book Problems (p. 925): 41

Goals for the Lecture:

- 1) Understand what the magnetic field looks like in and around a solenoid, including what makes an ideal solenoid
- 2) Be able to use Ampere's Law to calculate the magnetic field inside an ideal solenoid
- 3) Understand Gauss's Law for Magnetism, that there are no magnetic monopoles (at least, none have been found in nature)

Post-Lecture Study Guide (I do not collect this):

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas. Review the pre-lecture questions to make sure you understand them.

Do problems:

Ch 30: Conceptual Questions: 1

Ch 30: Objective Questions: 14 and 15

Ch 30: Problems: 43

Continue with the additional recommended study problems from chapter 30