

Lecture 18

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

- Read pages 874 – 882 in the textbook (Serway 9th edition) and do the following:
 - 1) Quick Quizzes: 29.2
 - 2) Book Objective Questions (p. 893): 4 and 7
 - 3) Book Problems (p. 895): 13

Goals for the Lecture:

- 1) Understand that charged particles typically move in circular paths when crossing magnetic field lines
- 2) Be able to solve problems involving centripetal force and circular motion in magnetic fields
- 3) Understand how these forces can be used in velocity selectors, mass spectrometers, and other applications

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 29: Conceptual Questions: 4, 6, and 7

Ch 29: Objective Questions: 10

Ch 29: Problems: 4 and 19

Continue with the additional recommended study problems from chapter 29