

## Lecture 27

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

- Read pages 970 – 977 in the textbook (Serway 9<sup>th</sup> edition) and do the following:
  - 1) Quick Quizzes: 32.1 – 32.3
  - 2) Book Objective Questions (p. 988): 2 and 6
  - 3) Book Conceptual Questions (p. 988): 2

### Goals for the Lecture:

- 1) Be able to calculate inductance and EMF generated across an inductor
- 2) Understand that RL circuits are very similar to RC circuits
- 3) Be able to solve problems involving time constants for RL circuits
- 4) Be able to calculate energy stored in the magnetic field of an inductor

### 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 32: Conceptual Questions: 5

Ch 32: Objective Questions: none

Ch 32: Problems: 17

Continue with the additional recommended study problems from chapter 32