

Chapter 24 Study Guide

Prior to lecture:

1. Read Ch. 24 in textbook
2. Work through example problem 24.1 and 24.3.
3. Read the “Maxwell’s Equations” on pages 867. Rewrite them in your own words.
4. On a sheet of paper, complete the “Take-Home Experiments” on pages 870 and 877.
5. Answer conceptual questions 1, 2, 6 and 8 on page 885 of the text.
6. Define the following terms:
 - a. Electromagnetic waves
 - b. Maxwell’s equations
 - c. Relation between electric
 - d. Magnetic field strength
 - e. Electromagnetic spectrum
 - f. Radio waves
 - g. Infrared radiation
 - h. UV radiation
 - i. Intensity of electromagnetic waves
 - j. Amplitude modulation
 - k. Frequency modulation

After the lecture

1. Review notes from lecture.
2. Redo all example problems from lecture.
3. Reread text
4. Work through examples 24.2 and 24.4 in the text.
5. Redo all recitation worksheet problems
6. Answer conceptual questions 4, 5, 7, 9, 13 and 16 of the text.
7. Complete homework for chapter 24
8. For extra practice, try the following problems from chapter 24 of the textbook: 1, 3, 4, 5, 6, 8, 9, 13, 15, 22, 27, 28, 29, 31, 32, 33, 35 and 41.