

## Lecture 31

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

- Read p. 450 – 457
- Do Quick Quizzes 15.1 – 15.4
- Ch 15 Objective Questions: 14 and 17

### Goals for the Lecture:

- 1) Understand what Period, Frequency, and angular frequency are and how they relate to one another
- 2) Understand how velocity and acceleration change during a cycle
- 3) Understand that simple harmonic motion comes about when the force is proportional to displacement

### Post-Lecture Study Guide:

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas.

Do problems:

Ch 15: Problems: 4, 5, and 19

Continue with the additional recommended study problems from chapter 15