

## Lecture 15

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

- Read pages 541 – 549 in the textbook (Serway 9<sup>th</sup> edition) and do the following:
  - 1) Quick Quizzes: 18.3 – 18.5
  - 2) Book Objective Questions (p. 556): 10
  - 3) Book Problems (p. 560): 38

### Goals for the Lecture:

- 1) Understand boundary conditions of strings and pipes/tubes and how they affect standing wave patterns
- 2) Understand the terms fundamental frequency, harmonic, and overtone.

### 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 18: Problems: 40 and 44

Continue with the additional recommended study problems from chapter 18