

## Lecture 14

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

- Read pages 517 – 522 and 533 – 540 in the textbook (Serway 9<sup>th</sup> edition) and do the following:
  - 1) Quick Quiz: 17.4 – 17.6 and 18.1 – 18.2
  - 2) Book Objective Questions (p. 523): 3 and 10
  - 3) Book Problems (p. 525): none

### Goals for the Lecture:

- 1) Understand Doppler Effect and be able to do calculations using the general formula
- 2) Understand what causes shock waves
- 3) Understand constructive and destructive interference
- 4) On a standing wave, understand the terms node and antinode and be able to determine the wavelength

### 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 17: Problems: 37 and 39

Ch 18: Problems: 4 and 19

Continue with the additional recommended study problems from chapter 17 and 18