

PHYSICS 151 READING ASSIGNMENT FOR DECEMBER 5 SECTIONS 15.1-15.3

15.1 - The Wave Model

- We'll only do mechanical waves in lecture. We'll come back to electromagnetic and matter waves in Physics II.
- There are actually three classes of waves: transverse, longitudinal, and rolling.

15.2 - Traveling Waves

- Wave speed v - the rate at which the energy propagates.
- We'll mostly concentrate on understanding what wave speed is, so the equations in this section are less important to me.

15.3 - Graphical and Mathematical Description of Waves

- We'll be sticking with the graphical description of sinusoidal waves.
- Wavelength, λ - distance between points that are at the same point in their cycle. Unit = meter.
- Wave speed relates wavelength and frequency, $v = \lambda f$.