

Day 15 – 3/26/14

Student Learning Objectives

By the end of this class you will be expected to understand:

- The properties of sound waves as they relate to hearing
- The three regions of the ear and their functions
- How the inner ear creates the senses of hearing and balance

Support videos:

- Structure of the Ear
 - <http://www.youtube.com/watch?v=qgdqp-oPb1Q>
 - http://www.youtube.com/watch?v=Oa_zq_ELnSE
- Bill Nye the Science Guy
 - http://www.youtube.com/watch?v=_pcsOG-H3Ac

Assigned reading:

- Chapter 12: p285-290

Vocabulary:

- Mechanoreceptor
- Sound
 - Air pressure
 - Resonance
 - Frequency or Pitch
 - Hertz
 - Amplitude or Volume
 - Decibels
- Outer ear
 - Pinna
 - Auditory canal
 - Tympanic membrane
 - Eardrum
- Middle ear
 - Ossicles
 - Oval window
 - Auditory tube
- Inner ear
 - Cochlea
 - Spiral organ
 - Hair cell
 - Cochlear nerve
 - Vestibular sense
 - Vestibule
 - Semicircular canals
 - Vestibular nerve