

Crown 85 Winter 2016

## Visual Perception: A Window to Brain and Behavior

### Lecture 2- Neuroanatomy

Reading: [Brain Basics \(very basic !!\)](#)

[Cold Spring Harbor \(≈ appropriate !!\)](#)

[Healthline \(appropriate\)](#)

[University of Texas Medical School \(very advanced !!\)](#)

Looking: [Basic Parts of the Brain - Part 1 - 3D Anatomy Tutorial \(anatomyzone\)](#)

Enjoy: [Friendly Guide to Human Brain Atlases \(history\)](#)

1. Be able to identify the following structures of the brain and, very generally, the behavior with which they are associated (**red** indicates involved in primary visual pathways).
  - a. Brainstem
    - i. reticular formation
    - ii. medulla oblongata
    - iii. pons
    - iv. midbrain (substantia nigra, **including superior colliculi**)
  - b. Cerebellum
  - c. Diencephalon
    - i. thalamus (**including lateral geniculate nuclei**)
    - ii. hypothalamus
    - iii. pineal gland
  - d. “very generally” the basal ganglia and the limbic stem
    - i. hippocampus
    - ii. amygdala
  - e. Cerebral Hemispheres
    - i. cerebral cortex = gray matter
    - ii. connections among cortical regions = white matter
    - iii. gyri and sulci
    - iv. frontal lobe
    - v. parietal lobe**
    - vi. temporal lobe**
    - vii. occipital lobe**
  - f. Functional areas (<http://www.alzheimerstreatment.space/tag/parts-of-the-brain-and-its-function>)

