Synaptic Organization of the Brain

CELL 655

Tuesday/Thursday 9:30-10:45

Laura Schrader – course director; schrader@tulane.edu

Course goals: To discuss and understand functional connections within and between areas of the brain to lead to a greater understanding of brain function. A strong emphasis will be placed on in-class discussions and student presentations to enhance critical thinking and oral presentation skills.

Course objectives– Students will demonstrate their understanding of material on one midterm exam (20%), final exam (25%) weekly take-home questions (20%), a presentation of a topical paper (20%) and in-class participation (15%).
Objective: To discuss and understand functional connections within and between areas of the brain.

1/12 Introduction, overview of course
1/14 passive and active membrane properties
1/19 basic synaptic transmission
1/21 student presentation
1/26 Thalamus – Dr. Inglis
1/28 student presentation
2/2 Neocortex – Dr. Schrader
2/4 student presentation
2/9 Association/parietal cortex – Dr. Schrader
2/11 student presentation
2/16-2/18 Mardi Gras
2/23 exam 1
2/25 Entorhinal cortex
3/2 student presentation
3/4 hippocampus anatomy (Chantelle Ferland)
3/9 Hippocampus physiology (Dr. Bridgeman)
3/11 student presentation
3/16 Hypothalamus (Dr. Tasker)
3/18 student presentation
3/24-3/26 SPRING BREAK
3/30 amygdala
4/1 student presentation
4/6 prefrontal cortex I
4/8 prefrontal cortex II
4/13 student presentation
4/15 Basal ganglia
4/20 student presentation
4/22 Cerebellum
4/27 student presentation

Final - Wed May 5, 1-5