ANAT 7575
Graduate Neuroscience

Goals
To acquire knowledge and develop skills in dissection-oriented neuroanatomy and neuroscience, and its application and relevance to human physiology and clinical disease.

Course format
This course provides in-depth knowledge of neuroanatomy and neuroscience. It includes dissection lab. Students attend classes with first-year medical students.

Grading
Grade will be calculated according to the following schematic:

Block exams (written and practical)
Peer evaluation

A final of B- or above is required to pass this course.

Block I

1, Course Introduction & Schedule/ Overview of the Brain, Dr. Blask
2, Overview of the Brain, Dr. Blask
3, Spinal Cord, Mr. Mascorro
4, Development of the Nervous System, Mr. Mascorro
5, Introduction to the Brainstem, Dr. Blask
6, Long Tracts of the Brainstem, Dr. Blask
7, Intrinsic Brainstem Nuclei & Tracts, Dr. Blask
8, Cranial Nerve Nuclei, Dr. Blask

Block II

9, Thalamus, Dr. Mendoza
10, 11, Cortex: Layers, Maps and Reorganization, and Higher Function, Dr. Mendoza
12, Somatosensory Pathways; Mr. Mascorro
13, Somatosensory Receptors; Dr. Kreisman
14, Somatosensory Cortex; Dr. Kreisman
15, Motor Reflexes, Dr. Kreisman
16, Motor Cortex, Dr. Kreisman
17, Upper and Lower Motoneurons, Mr. Mascorro
18, Basal Ganglia, Dr. Mendoza
19, Cerebellum, Mr. Mascorro
20, 21, Neurotransmitters, Receptors, Disorders of Neurotransmitters, Dr. Tasker
Dr. Mendoza's Review for Exam II

Block III

22, Hippocampus and Amygdala; Limbic System, Dr. Mendoza
23, Frontal Lobes, Dr. Mendoza
24, EEG, Dr. Kreisman
25, Epilepsy, Dr. Kreisman
26, Ventricular System CSF, Mr. Mascorro
27, Blood Flow and Brain Metabolism, Dr. Kreisman
28, Stroke Mechanisms, Ischemic Cascade, Dr. Kreisman
29, Visual Pathways, Dr. Wang
30 & 31, Retinal Physiology; Central Visual Physiology, Dr. Derbenev
32, Auditory Pathways, Dr. Blask
33, Vestibular Pathways, Dr. Blask
34, Hypothalamic Control I, Dr. Blask
35, Hypothalamic Control II, Dr. Blask
36, Neural Regulation of Circadian Rhythms, Dr. Blask

Course Director:
Dr. David Blask

Credits: 6

Dates of class:
Every week as posted

Required:
Attend dissections
Take block exams

Grades
Final grades will be posted in Blackboard at the end of the course

100 – 94	A
93.9 – 88	A-
87.9 – 82	B+
81.9 – 76	B
75.9 – 70	B-
Below 70	C+