

# Anatomy and Neurobiology (ANATOMY)

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## Courses

### **ANATOMY 200. Research in Anatomy. 2-12 Units.**

Individual research supervised by a particular faculty member.

Repeatability: May be repeated for credit unlimited times.

### **ANATOMY 200R. Research in Anatomy and Neurobiology for First-Year Students. 2-12 Units.**

Independent research within the laboratories of graduate training faculty in the Department of Anatomy and Neurobiology for first-year Ph.D. students.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be taken for credit 3 times.

### **ANATOMY 201. Human Gross Anatomy. 8 Units.**

Study and dissection of the human body, including muscular, skeletal, nervous, and cardiovascular systems. Emphasis on both normal and abnormal structure and function.

Restriction: Graduate students only.

### **ANATOMY 202B. Human Neuroscience. 4 Units.**

Study of the human nervous system at the systems level including the physiology and anatomy of sensory, motor, and integrative functions.

Prerequisite: ANATOMY 202A. ANATOMY 202A with a grade of B- or better

### **ANATOMY 203A. Human Microscopic Anatomy. 3 Units.**

Lecture and laboratory course on human microscopic anatomy. Emphasis is on functional implications of structure of cells and tissues.

Restriction: Graduate students only.

### **ANATOMY 203B. Human Microscopic Anatomy. 3 Units.**

Lecture and laboratory course on human microscopic anatomy. Emphasis is on functional implications of structure of cells and tissues.

Prerequisite: ANATOMY 203A. ANATOMY 203A with a grade of B- or better

Restriction: Graduate students only.

### **ANATOMY 206. Tutorial in Anatomy. 3 Units.**

Series of tutorials on advanced topics in anatomy.

Repeatability: May be repeated for credit unlimited times.

### **ANATOMY 206B. Neuroanatomy from a Systems Perspective: Humans to Rodents. 3 Units.**

Covers structures and pathways of the functional systems of the human brain (motor, sensory, visual, auditory, and limbic) and how these are represented in rodents, emphasizing circuitry involved in learning and memory, neurodegenerative disorders, and neurotrauma.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

### **ANATOMY 206C. Tutorial in Microanatomy. 3 Units.**

Special topics in microanatomy. Primarily library work, but study of prepared histological slides and photographs included.

Repeatability: May be repeated for credit unlimited times.

### **ANATOMY 210A. Systems Neuroscience. 5 Units.**

Study of the mammalian nervous system at the systems level. Anatomy and physiology of sensory, motor, and integrative functions.

Repeatability: May be taken for credit 2 times.

Same as NEURBIO 208.

Restriction: Graduate students only. Neurobiology and Behavior Majors only.

**ANATOMY 215. Epilepsy as a Window to Mechanisms of Neuronal Plasticity. 4 Units.**

Understanding the mechanisms of brain disorders provides novel insights into the normal function of neurons and circuits. Discusses approaches to studying mechanisms of brain function ranging from imaging, the use of models and others to study epilepsy.

Grading Option: Satisfactory/unsatisfactory only.

**ANATOMY 227A. Current Topics in Neuroscience. 1-4 Units.**

Focuses on critical reading, presentation, and discussion of current literature in neuroscience research.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**ANATOMY 227B. Current Topics in Neuroscience. 1-4 Units.**

Focuses on critical reading, presentation, and discussion of current literature in neuroscience research.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**ANATOMY 227C. Current Topics in Neuroscience. 1-4 Units.**

Focuses on critical reading, presentation, and discussion of current literature in neuroscience research.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

**ANATOMY 230. Topics in Translational Neuroscience. 2-4 Units.**

One-hour seminar presentation by participating faculty or guest lecturer and open to the science community, followed by one-hour student discussion of the lecture topic or related topic. Students are responsible for presentations and readings.

Repeatability: May be taken for credit 2 times as topics vary.

Restriction: Graduate students only. Interdepartmental Neuroscience Majors have first consideration for enrollment.

**ANATOMY 230A. Molecular, Cellular, & Developmental Neurobiology. 4 Units.**

Molecular aspects of the structure and function of neurons and glia including neurotransmission, synaptic modulation, and channels. Neural development at the cellular and molecular level including neurogenesis, pattern formation, trophic factors, axonal growth, and synaptic rearrangement.

Restriction: Graduate students only.

**ANATOMY 292A. Topics in Neural Circuit Mapping. 2-4 Units.**

Presentations/lectures by invited faculty and student discussion.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

**ANATOMY 292B. Scientific Communication. 2 Units.**

Small group meetings for graduate students to practice scientific writing, debate, and presentation skills.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

**ANATOMY 292C. Scientific Communication. 2 Units.**

Small group meetings for graduate students to practice scientific writing, debate, and presentation skills.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.