Neuroscience Courses (NSCI)

NSCI Courses

This is a list of courses with the subject code NSCI. For more information, see Neuroscience (Graduate College) in the catalog.

**NSCI:5212 Foundations in Behavioral and Cognitive Neuroscience**  
4 s.h.  
Concepts, methods, and findings in behavioral and cognitive neurosciences. Prerequisites: BIOL:3253. Same as PSY:5212.

**NSCI:5365 Seminar: Neuropsychology and Neuroscience**  
arr.  
Clinical neuropsychology and cognitive neuroscience: cutting-edge research from scientific journals, case presentations in clinical neuropsychology, and current research. Same as NEUR:5365, PSY:5365.

**NSCI:5653 Fundamental Neurobiology I**  
3 s.h.  
Neurobiology from molecular/cellular to systems levels, including cell biology of the neuron; membrane electrophysiology; synaptic transmission and plasticity, functional neuroanatomy, sensory, motor and autonomic systems; emotion, memory, sleep, language, attention and cognition, neuronal development; focus on systems and developmental neurobiology; first in a two-semester sequence. Same as BIOL:5653, PSY:5203.

**NSCI:5654 Fundamental Neurobiology II**  
3 s.h.  
Neurobiology from molecular/cellular to systems levels, including cell biology of the neuron; membrane electrophysiology; synaptic transmission and plasticity; functional neuroanatomy, sensory, motor and autonomic systems; emotion, memory, sleep, language, attention and cognition, neuronal development; focus on molecular/cellular neurobiology and neurophysiology; second in a two-semester sequence. Prerequisites: BIOL:5653 or NSCI:5653 or PSY:5203. Same as BIOL:5654, PSY:5205.

**NSCI:5658 Fundamental Neurobiology I Discussion**  
2 s.h.  
Discussion of selected papers, including classics from neurobiology literature; coordinated with BIOL:5653 lecture material. Same as BIOL:5658, PSY:5204.

**NSCI:5659 Fundamental Neurobiology II Discussion**  
2 s.h.  
Discussion of selected papers, including classics from neurobiology literature; coordinated with BIOL:5654 lecture material. Same as BIOL:5659, PSY:5206.

**NSCI:6050 Advanced Quantitative Training for Neuroscience**  
4 s.h.  
Review of statistical inference, type-I errors, statistical power, measurement reliability issues in context of between-/within-subjects t-tests, ANOVAs, correlations, and regressions with attention to causality and generalizability; multiple linear regression, model building, model testing, confounding/mediation, interactions; mixed models with nested/crossed, fixed/random factors, and repeated measure designs. Offered spring semesters. Prerequisites: PSY:5050.

**NSCI:6265 Neuroscience Seminar**  
0-1 s.h.  

**NSCI:7235 Neurobiology of Disease**  
3 s.h.  
Broad, thematic understanding of disease mechanisms in neurobiological disorders. Prerequisites: ACB:6252. Same as NEUR:7235.

**NSCI:7301 Directed Study in Neuroscience**  
arr.  
Requirements: neuroscience graduate standing.

**NSCI:7305 Neuroscience Research**  
arr.  
Requirements: neuroscience graduate standing.