

# NEUROSCIENCE (NEU)

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## **NEU 607 Advanced Neuroscience (3 Credits)**

*Arts & Sciences*

Cross-listed with BIO 607

Double-numbered with BIO 407, NEU 407

Detailed analysis of the anatomy, physiology, and chemistry of the nervous system and behaviors that it mediates. Topics include: neurons and electrochemical properties of neurons, sensory and motor systems, homeostasis, sleep, consciousness, learning, and memory. Additional work required of graduate students.

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>)

## **NEU 613 Readings in Neuroscience (0-3 Credits)**

*Arts & Sciences*

Cross-listed with BIO 624, CSD 753, PSY 778, BEN 613

A literature-based team-taught course focusing on in depth discussions of classical or recent papers of exceptional import to neuroscience. Students will complete weekly readings assigned by faculty and participate in a 3-hr/wk group facilitated discussion

## **NEU 614 Interdisciplinary Methods of Neuroscience (0-3 Credits)**

*Arts & Sciences*

Cross-listed with BIO 625, CSD 754, PSY 779, BEN 614

A practical interdisciplinary survey course whereby neuroscience faculty introduce students to a wide array of methodologies, including molecular, cellular, developmental, systems, behavioral, and cognitive neuroscientific approaches to investigate basic, pre-clinical, translational, and clinical questions to unravel the relationship between brain and behavior.

## **NEU 777 Advanced Cognitive Neuroscience (3 Credits)**

*Arts & Sciences*

Cross-listed with PSY 777

The science of how thought processes are instantiated in the brain including advanced techniques for behavioral and neural data and approaches for linking them together. Applications that demonstrate the brain-behavior relationship.