

Goal 1: Students should understand core concepts, empirical findings and their interpretations in neuroscience.

- 1) Students should be able to identify core concepts, key research findings and their interpretations in neuroscience.
- 2) Students should be able to identify the broader implications of core research findings in neuroscience, based on their critical analysis of the literature.

Goal 2: Neuroscience is an interdisciplinary field. Students should understand core concepts from related fields and their relevance to neuroscience and synthesize information and knowledge across disciplines.

- 1) Students should be able to read, interpret, and critically evaluate literature from neuroscience-related fields, spanning from the cognitive/behavioral sciences to cellular/molecular biology.
- 2) Students should demonstrate the ability to describe a neuroscience-related topic at multiple levels of analysis, integrating information from multiple related disciplines.

Goal 3: Students should demonstrate an understanding of the scientific process in neuroscience, including methodologies, data analysis and interpretation and science communication, based on direct experience.

- 1) Students should experience hypothesis-driven scientific research first-hand either through coursework or independent research.
- 2) Students should demonstrate a basic understanding of experimental design and statistical analysis, and effectively present quantitative information.
- 3) Students should effectively communicate research orally and in writing.