

**S272 Bionic Brains: Applications of Neurotechnology**  
**UCLA Splash 2023**

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**Course Description and Objectives:**

This course is an introduction to assistive devices powered by neurotechnology and the scientific principles behind how they operate. Topics include basic neuroscience, electrophysiology, brain-computer interfaces, prosthetics, deep brain stimulation, and developing technologies. There are no prerequisites for this course.

**Topics:**

Neuroscience Basics

Electroencephalography

Brain-Computer Interfaces & Neuroprosthetics

Brain Stimulation: DBS & TMS

Research at UCLA and Beyond