Neuroscience

Professors: Batsell, Érdi, Moore (co-directors)

Neuroscience, an academic discipline concerned with investigation of nervous system structure and function, has been a cornerstone of biology since the turn of the 20th century. Modern biological examination of the brain and behavior of organisms has incorporated other fields of inquiry, namely biochemistry, psychology, physics, mathematics, computational modeling, and philosophy, making neuroscience a truly interdisciplinary effort. A concentration in neuroscience is offered for advanced students who want to study at the confluence of these traditional disciplines.

The Concentration in Neuroscience

Number of Units
Nine

Required Courses
BIOL 246 Cell and Molecular Biology with Lab*  
BIOL 350 Neurobiology with Lab  
PSYC 101 General Psychology  
PSYC 226 Physiological Psychology  
PHYS 215 Introduction to Complex Systems  
COMP/PSYC 265 Cognitive Science

Any three from the following list:
BIOL 484 Topics in Biology: Neurodegenerative Disorders  
COMP/PSYC 415 Computational Neuroscience  
PSYC 280 Cognition  
PSYC 420 Learning  
PHIL 107 Logic and Reasoning  
PHIL 308 Metaphysics and Mind  
COMP 480 Special Topics: TBA  
PHYS 210 Nuclear and Medical Physics

Up to two of the three additional course units may be fulfilled by transfer credit from the Budapest Semester in Cognitive Science.

Concentrators in neuroscience must pass the 9 units with a C- or better. Note that courses taken for fulfillment of major requirements may “double count” towards the concentration (for example, BIOL 246 can “double count” for the biology major AND the neuroscience concentration).

* BIOL 246 may be taken with special instructor permission or by successful completion of course prerequisites.