NEUROSCIENCE CONCENTRATION WORKSHEET

The Neuroscience concentration consists of a minimum of six courses: two foundation courses, three electives (two with lab), and one 300-level seminar.

FOUNDATION COURSES (may be taken in either order):

_____Psychology 238: Biopsychology

_____Neuroscience 239: Cellular/Molecular Neuroscience

ELECTIVES (at least one from Category A: Neuroscience Core)

_____1. Category A _____

_____2. Category A or B* _____

(*Note: if elective 2 is from Category B, it must be from a different department than elective 1)

_____3. Category A, B or C _____

SEMINAR

_____300-Level Seminar: _____

NEUROSCIENCE ELECTIVES

Category A: Core Neuroscience Courses

At least one category A elective is required to complete the concentration, but up to three can count towards the concentration.

BIO 247 Animal Physiology
BIO 386 Animal Behavior
BIO 387 Neuroethology
PSYCH 235 Sensation and Perception
PSYCH 236 Conditioning and Learning
PSYCH 237 Cognitive Psychology
PSYCH 393 Advanced Research Collaborations (when taught by neuroscience faculty)
PSYCH 395 Advanced Research Methods (when taught by neuroscience faculty)

Category B: Lab Elective Courses

At most two category B courses can count towards concentration. For a category B course to count as elective 2, it must be from a different department than your elective 1 course.

CH/BI 227 Integrated Chem/Bio III: Molecular and Cellular Biology
BIO 227 Cell Biology
BIO 233 Intermediate Genetics
BIO 243 Human Anatomy and Physiology: Organs and Organ Systems
BIO 364 Molecular Biology
BIO 372 Developmental Biology
CHEM 379 Biochemistry I *and* CHEM 373 Experimental Biochemistry Lab (0.25) (note: both courses are required)
PHYS 246 Electronics
Directed Undergraduate Research (396) and Independent Research (398) courses may count with **pre-approval** of the program director

Category C: Additional Electives

At most one category C course can count towards the concentration.

CHEM 379 Biochemistry I
CSCI 121 Principles of Computer Science
CSCI 125 Computer Science for Scientists and Mathematicians
CSCI 253 Algorithms and Data Structures
ECON 372 Behavioral Economics
KINES 373 Motor Control and Learning
KINES 375 Physiology of Exercise
ID 271 Topics in Interdisciplinary Studies (when topic is "Addiction from the Brain to the Social" or "Frontiers in Aging")
MATH 236 Mathematics of Biology
MATH 230 Differential Equations I
MSCS 264 Introduction to Data Science
PHIL 231 Philosophy of Mind
PHIL 244 Philosophy of Science
PHIL 250 Biomedical Ethics
PHIL 251 Science, Ethics, and Religion
PHYS 116 Light, Vision, and Art
PHYS 390 Selected Topics (if neuroscience focus)
PSYCH 239 Drugs, the Brain and Behavior
SCICN 217 The Cultural Context: Science and Society
STAT 272 Statistical Modeling
Other electives can count if approved by the program director

NEUROSCIENCE 300-LEVEL SEMINARS

BIO 385 The Neuron
BIO 391 Selected Topics (when topic is "Developmental Neurobiology, Animal Communications, or Computational Neuroscience")
PSYCH 336 Neuroscience of Addiction
PSYCH 337 Neurobiology of Learning and Memory
PSYCH 338 Neurobiology of Psychopathology
PSYCH 339 Cognitive Neuroscience
PSYCH 390 Issues in Psychology (when topic is neuroscience related and approved by program director)
Other seminar courses can count if approved by the program director