

# NEUROSCIENCE CONCENTRATION CONTRACT

Name: \_\_\_\_\_

Class of: \_\_\_\_\_

Major(s): \_\_\_\_\_

Concentration(s): \_\_\_\_\_

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: \_\_\_\_\_

This contract may be altered at any time by mutual consent.

\_\_\_\_\_  
Student signature

\_\_\_\_\_  
date

\_\_\_\_\_  
Program director signature

\_\_\_\_\_  
date

## **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 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  
ESTH 373 Motor Control and Learning  
ESTH 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 "Stress and Development" or "Aging Brain and Cognition")  
Other seminar courses can count if approved by the program director