NEUROSCIENCE, DOCTORAL MINOR

REQUIREMENTS

Code	Title	Credits
Required		
NTP/ NEURODPT 610	Cellular and Molecular Neuroscience	4
NTP/NEURODPT/ PSYCH 611	Systems Neuroscience	4
Electives		**1-3**
Select a mid-level course from the lists below.		
Total Credits		**9**

Students must receive a grade point average of 3.0 for all required courses to receive the minor.

Once the requirements have been met, please return the completed PhD Minor in Neuroscience Form (https://ntp.wiscweb.wisc.edu/wp-content/uploads/sites/81/2017/03/PhD_Minor_Form.pdf) to the Neuroscience Training Program office for signature by the program director.

ELECTIVES

Cellular/Molecular/Developmental Approved Mid-levels

Code	Title	Credits
BIOCHEM/ PHMCOL-M/ ZOOLOGY 630	Cellular Signal Transduction Mechanisms	3
B M E/MED PHYS/ PHMCOL-M/PHYSICS/ RADIOL 619	Microscopy of Life	3
NTP/ NEURODPT 629	Molecular and Cellular Mechanisms of Memory	3
NTP 670	Stem Cells and the Central Nervous System	2-3
NTP 675	Special Topics (Molecular Mechanisms of Brain Damage)	2
NTP 675	Special Topics (Reproductive Neuroendocrinology)	1-3
NTP/NEUROL 735	Neurobiology of Disease	2
NTP/NEURODPT/ ZOOLOGY 765	Developmental Neuroscience	3
ZOOLOGY 604	Computer-based Gene and Disease/Disorder Research Lab	2

Systems/Behavioral/Computational Approved Mid-levels

Code	Title	Credits
B M E 601	Special Topics in Biomedical Engineering (Problem-Based Learning in Clinical Neuroengineering Seminar)	2
CS&D 850	Hearing Science I: Basic Acoustics and Psychoacoustics	3
COMP SCI/B M I/ PSYCH 841	Computational Cognitive Science	3
KINES 713	Neural Basis of Normal and Pathological Movement	3
KINES 721	Neural Basis for Movement	3
KINES 861	Principles of Motor Control and Learning	3
NTP 677	Basic Sleep Mechanisms and Sleep Disorders: from Neurobiology to Sleep Medicine	3
NTP 675	Special Topics (Neuroethology)	2
NTP 675	Special Topics (Brain Mapping in Health and Disease: Applications)	3
NTP/MED PHYS 651	Methods for Neuroimaging Research	3
PSYCH 720	Essentials of Cognitive Neuroscience	3
PSYCH 711	Current Topics in Psychology (Cognitive Neuroscience of Attention and Memory)	2-3
PSYCH 711	Current Topics in Psychology (Introduction to Neural Network Modeling of Cognition)	2-3
PSYCH 733	Perceptual and Cognitive Sciences (Perceptual Systems Analysis) [1]	2
PSYCH 733	Perceptual and Cognitive Sciences (Cognitive Neuroscience of Reading and Dyslexia) [1]	2
PSYCH 733	Perceptual and Cognitive Sciences (Knotty Problems in Psycholinguistics) [1]	2
PSYCH 918	Seminar-General Psychology (Visual Perception)	1-3
PSYCH 954	Seminar-Physiological Psychology (Neuropharmacology)	3

1 Two PSYCH 733 courses (8 weeks each) must be taken to meet the midlevel systems requirement.