

# PHARMACOLOGY & NEUROSCIENCE (PHD)

## Ph.D., Pharmacology & Neuroscience (Minimum of 90 credits)

The Pharmacology and Neuroscience doctoral program is research-intensive providing in-depth understanding of the chosen field of interest and the scientific method. This program will prepare the student for a career in research or as a leader in academia or the pharmaceutical/biotech industries.

The student will select a major adviser and assemble a dissertation committee. The student, adviser and committee will formulate a plan of study. The adviser and committee will assist the student during the entire course of the program.

Code	Title	Credits
<b>Required Didactic Courses</b>		
IDC 601	Responsible Conduct of Research	1
IDC 625	Introduction to Biostatistics for the Biomedical Sciences	3
IDC 701	Research Writing	3
PHR 536	Drugs and Drug Targets (Research Courses)	2
PHR 537	Fundamentals of Neuroscience	3
PHR 715	Foundational Science	4
<b>Required Seminars and Topical Courses</b>		
PHR 531	Topics in Pharmacology and Drug Discovery Journal Club	4-5
PHR 532	Hot Topics in Neuroscience Journal Club	4-5
PHR 750	Research Discussions In Pharmacology & Neuroscience	10-14
PHR 760	Research Rounds In Pharmacology & Neuroscience	8-12
PHR 791	Pharmacology & Neuroscience Seminar	7
<b>Required Research Courses</b>		
PHR 595	Directed Independent Study	11-15
PHR 597	Directed Independent Research	18-20
PHR 795	Directed Independent Study	22-40
PHR 897	Doctoral Directed Independent Research	24-40
PHR 899	Doctoral Dissertation	4-12
<b>Electives</b>		
IDC 627	Research Methods	
PHR 461	Integrative and Alternative Medicine	
PHR 631	Medical Pharmacology I	
PHR 632	Medical Pharmacology II	
PHR 650	Introduction to Neuropharmacology	
PHR 667	Developmental Biology	
PHR 711	Receptor and Molecular Pharmacology	
PHR 720	Fundamentals of Brain Imaging, Recording, and Stimulation	
PHR 790	Research Laboratory Rotations	
PHR 794	Special Topics in Pharmacology & Neuroscience	

The student must maintain at least a B (3.0) average throughout the PhD program, with no more than six credits with a grade below B-.

*Comprehensive Examinations:* Doctoral students are required to pass comprehensive and qualifying examinations in order to advance to candidacy according to the guidelines of the graduate school.

*Dissertation:* Ph.D. candidates must present and defend a dissertation. The defense is open to the public, but only the student's dissertation committee may directly participate in the examination. The written dissertation must be presented to the committee at least 30 days prior to the defense.