College of Pharmacy

Department of Pharmaceutical Sciences

Graduate Education - Affiliated with Biomedical Sciences Graduate Program
Ph.D. requirements: 48 credit hours of coursework (including a maximum of 12 credit hours of PHRM 597 "Research in Pharmaceutical Sciences" in lieu of BIOM 695) plus 18 dissertation hours (PHRM 699 in lieu of BIOM 699).

Course Curriculum:

In addition to BSGP requirements (27 cr), students in the Department of Pharmaceutical Sciences are required to take:	
Pharm 593 (1 cr), each semester offered	**Pharmaceutical Sciences & Toxicology Seminar** – Current research in Pharmaceutical Sciences and Toxicology. Students and faculty from within UNM and invited speakers from outside UNM
Pharm 576 (1 cr)	**Cellular and Molecular Pharmacology** – Basic principles of modern molecular and cellular pharmacology, including receptor theory and drug metabolism
At least one other PHRM didactic course	**PHRM 580:Toxicology** (2 cr)– Basic principles and mechanisms of toxicology, including organ system toxicology, chemical carcinogens, and biotransformations of xenobiotics.
	PHRM 598: Cardiovascular Pharmacology (1 cr)– Mechanisms of action of diuretics, antihypertensives, antianginals, antiarrhythmics, anti-thrombolytics, and anti-hyperlipidemics
	PHRM 598: CNS Pharmacology (1 cr)– Mechanisms of action of antidepressants, antipsychotics, anticonvulsants, anesthetics, anxiolytics, sedative-hypnotics, muscle relaxants, and opioid analgesics
	PHRM 598: Autonomic Pharmacology (1 cr)– Mechanisms of action of drugs stimulating or inhibiting the sympathetic and parasympathetic systems
	PHRM 598: Cancer/Immuno- Pharmacology (1 cr)– Mechanisms of action of immunosuppressants, and chemotherapeutants
	PHRM 598: Endocrine Pharmacology (1 cr)– Mechanisms of action of drugs altering thyroid, reproductive organs, adrenal, hypothalamus-pituitary function
	PHRM 598: Infectious Disease Pharmacology (1-2 cr)– Mechanisms of action of antimicrobial agents
PHRM 597-each semester, up to 6 cr hr/semester	**Independent Research (in lieu of BIOMED 695)** (maximum of 12 cr hrs count towards graduation requirement of 48 hrs)
PHRM 699-at least 3 cr hr/semester, each semester after passing comprehensive exam	**Dissertation (in lieu of BIOMED 699)** (minimum of 18 cr hrs)

Progression Timeline for Ph.D. Students:

Year and Semester	Expected Goals
1st Year	
○ Fall	Complete required courses; complete two research rotations
○ Spring	Complete required courses; complete third research rotation and choose mentor
○ Summer (May)	Pass Qualifying Exam
2nd Year	Complete required courses within Department of mentor Conduct lab research Re-take (if needed) qualifying exam (Jan)
3rd Year	Complete required courses within Department of mentor Conduct lab research Pass Comprehensive Exam to Advance to Candidacy
4-5th Years	Complete dissertation research, defend and graduate