

Pharmaceutical Sciences Doctor of Philosophy Program

Course Requirements

The following tables outline the course requirements for students in each of the four focus areas of study. CORE courses are required of all students. Additional elective courses may be recommended or required by the student's doctoral committee. All CORE and Required courses must be satisfactorily completed prior to taking the comprehensive oral examination.

(Note: All requirements specified in this document are subject to change.)

August 10, 2005

Drug Disposition and Response

CORE:		CREDITS
PHARM 2001	Pharmaceutical Analysis	3
PHARM 3020	Pharmacogenetics	3
PHARM 3040	Statistical Methods I	2
PHARM 3041	Statistical Methods II	2
PHARM 3063	Graduate Research Rotations	6
PHARM 3038	Essentials of Competitive Grant writing 1	2
PHARM 3038	Essentials of Competitive Grant writing 2	2
PHARM 3025	Seminar in Pharmaceutical Sciences	1 + 1 + 1 + 1
PHARM 3027	Topics in Biopharmaceutics and Pharmacokinetics	1 + 1
Choose from:		1 + 1
PHARM 3009	Topics in Pharmaceutical Sciences	
PHARM 3000	Topics in Neurosciences	
PHARM 3027	Topics in Biopharmaceutics and Pharmacokinetics	
Required Courses:		
PHARM 3002	Advanced Pharmacokinetics	4
EOH 2302	Molecular Aspects of Toxicology	2
PHARM 3010	Ph.D. Dissertation Research or	
PHARM 2010	Master of Science	
CREDITS REQUIRED PRIOR TO COMPREHENSIVE EXAM		34
Elective Courses:		
PHARM 3008	Advanced Drug Delivery and Targeting	3

Drug Delivery and Targeting

CORE:		CREDITS
PHARM 2001	Pharmaceutical Analysis	3
PHARM 3020	Pharmacogenetics	3
PHARM 3040	Statistical Methods I	2
PHARM 3041	Statistical Methods II	2
PHARM 3063	Graduate Research Rotations	6
PHARM 3038	Essentials of Competitive Grant writing 1	2
PHARM 3038	Essentials of Competitive Grant writing 2	2
PHARM 3025	Seminar in Pharmaceutical Sciences	1 + 1 + 1 + 1
Choose from:		1 + 1 + 1 + 1
PHARM 3009	Topics in Pharmaceutical Sciences	
PHARM 3027	Topics in Biopharmaceutics and Pharmacokinetics	
PHARM 3000	Topics in Neurosciences	
Required:		
PHARM 3008	Advanced Drug Delivery and Targeting	3
PHARM 3010	Ph.D. Dissertation Research or	
PHARM 2010	Master of Science	
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CREDITS REQUIRED PRIOR TO COMPREHENSIVE EXAM		31
Electives:		
PHARM 3002	Advanced Pharmacokinetics	4

Genomics Proteomics and Drug Discovery

CORE:		CREDITS
PHARM 2001	Pharmaceutical Analysis	3
PHARM 3020	Pharmacogenetics	3
PHARM 3040	Statistical Methods I	2
PHARM 3041	Statistical Methods II	2
PHARM 3063	Graduate Research Rotations	6
PHARM 3038	Essentials of Competitive Grant writing 1	2
PHARM 3038	Essentials of Competitive Grant writing 2	2
PHARM 3025	Seminar in Pharmaceutical Sciences	1 + 1 + 1 + 1
PHARM 3009	Topics in Pharmaceutical Sciences	1 + 1
Choose from:		1 + 1
PHARM 3009	Topics in Pharmaceutical Sciences	
PHARM 3027	Topics in Biopharmaceutics and Pharmacokinetics	
PHARM 3000	Topics in Neurosciences	
Required Courses:		
PHARM 3010	Ph.D. Dissertation Research	or
PHARM 2010	Master of Science	

CREDITS REQUIRED PRIOR TO COMPREHENSIVE EXAM

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Elective Courses:
Courses in Chemistry, proteomics and genomics

Neuroendocrine: Pharmacology

CORE:		CREDITS
PHARM 2001	Pharmaceutical Analysis	3
PHARM 3020	Pharmacogenetics	3
PHARM 3040	Statistical Methods I	2
PHARM 3041	Statistical Methods II	2
PHARM 3063	Graduate Research Rotations	6
PHARM 3038	Essentials of Competitive Grant writing 1	2
PHARM 3038	Essentials of Competitive Grant writing 2	2
PHARM 3025	Seminar in Pharmaceutical Sciences	1 + 1 + 1 + 1
PHARM 3000	Topics in Neurosciences	1 + 1
Choose from:		1 + 1
PHARM 3009	Topics in Pharmaceutical Sciences	
PHARM 3027	Topics in Biopharmaceutics and Pharmacokinetics	
PHARM 3000	Topics in Neurosciences	
Required Courses:		
PHARM 3010	Ph.D. Dissertation Research	or
PHARM 2010	Master of Science	

CREDITS REQUIRED PRIOR TO COMPREHENSIVE EXAM

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Elective Courses:

PHARM 2002	Concepts of Pharmacology	3
PHARM 3028	Pharmacology and Therapeutics	5
PHARM 2007	Special Topics in Drug Research	3
PHARM 3002	Advanced Pharmacokinetics	4
PHARM 3029	Modeling and Simulation in Drug Development	3
PHARM 3008	Advanced Drug Delivery and Targeting	3
PHARM 5118	Principles of Drug Action	4
PHARM 5218	Drug Development 2	4
PHARM 2003	Intro to Pharmacoepidemiology	2

Clinical Scientist Training Program

CORE:		CREDITS
PHARM 2001	Pharmaceutical Analysis	3
PHARM 3020	Pharmacogenetics	3
PHARM 3040	Statistical Methods I	2
PHARM 3041	Statistical Methods II	2
PHARM 3063	Graduate Research Rotations	6
PHARM 3038	Essentials of Competitive Grant writing 1	2
PHARM 3038	Essentials of Competitive Grant writing 2	2
PHARM 3025	Seminar in Pharmaceutical Sciences	1 + 1 + 1 + 1
Choose from:		1 + 1 + 1 + 1
PHARM 3009	Topics in Pharmaceutical Sciences	
PHARM 3027	Topics in Biopharmaceutics and Pharmacokinetics	
PHARM 3000	Topics in Neurosciences	
Required Courses:		
PHARM 3002	Advanced Pharmacokinetics	4
PHARM 5218	Drug Development 2	4
PHARM 3010	Ph.D. Dissertation Research	or
PHARM 2010	Master of Science	

CREDITS REQUIRED PRIOR TO COMPREHENSIVE EXAM

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Elective Courses: