

# PHARMACY, MASTER OF SCIENCE

## Graduate Program in Pharmaceutical Sciences

The **Pharmaceutical Sciences Graduate Program** is housed in the Department of Pharmaceutical and Environmental Health Sciences in the College of Pharmacy and Health Sciences (COPHS) and is led by a group of active, productive faculty. Over the last several years COPHS has been developing its research infrastructure, which now has reached the level to support the program adequately. Collectively, the Research Centers in Minority Institutions, the Center for Cardiovascular Diseases, and the Center of Excellence in Health Disparities Research have contributed significantly to the development of research infrastructure in the COPHS.

The Doctor of Philosophy in Pharmaceutical Sciences with specialization in pharmacology and pharmaceuticals is offered through the program. The Master of Science in Pharmaceutical Science s is also offered as a contingency program. The M.S. and Ph.D. degree curricula are designed to provide a scientifically integrated training that permits students to:

1. Acquire knowledge and skills that facilitate a comprehensive understanding of the genesis and progression of pathological conditions;
  2. Apply knowledge and skills to the discovery, design, development, and delivery of drugs and dosage forms;
  3. Be prepared to pursue professional careers in academic, pharmaceutical industry, and governmental settings.
1. Completion of 40 credit hours of course work.
  2. Minimum of one presentation at a national research meeting.
  3. Submission of one research paper to indexed-refereed journal.
  4. Successful public defense of thesis.

## Summary

Code	Title	Hours
	Core Curriculum Requirements (p. 1)	14
	Electives (p. 1)	6
	Specialization Requirements (p. )	9
	Dissertation/Thesis Requirements (p. 1)	9
	<b>Total Hours</b>	<b>38</b>

## Core Curriculum Requirements

Code	Title	Hours
PHS 800	Bioethics	3
PHS 801	Biostatistics	3
PHS 802	Sem/Special Topics	1
PHS 803	Seminar/Special Topics	1
	Select one of the following:	3
	PHS 809 Pharmacology <sup>1</sup>	
	PHS 810 Physical Pharmacy <sup>2</sup>	
PHS 814	Lab Rotation	3
	<b>Total Hours</b>	<b>14</b>

<sup>1</sup> Pharmacology Track

<sup>2</sup> Pharmaceutics Track

## Foundation/Leveling Courses

Code	Title	Hours
PHAR 426	Pathophysiology	2
PHAR 428	Pharmacology	2
PHAR 539	Pharm III Pharmacokinetics	3
PHAR 519	Pharm III Pharmacokinetics Lab	1
	<b>Total Hours</b>	<b>8</b>

## Electives

Code	Title	Hours
	Select two of the following:	6
	PHS 811 Pharmacokinetics <sup>2</sup>	
	PHS 812 Advanced Biochem <sup>1,2</sup>	
	PHS 913 Molecular Pharmacology <sup>1</sup>	
	<b>Total Hours</b>	<b>6</b>

<sup>1</sup> Pharmacology Track

<sup>2</sup> Pharmaceutics Track

## Specialization

Code	Title	Hours
	Select three of the following:	9
	PHS 808 Pathophysiology	
	PHS 901 Cell Biology	
	PHS 906 Advanced Pharmacokinetics	
	PHS 907 Advanced Pharmaceutics	
	<b>Total Hours</b>	<b>9</b>

## Dissertation, Research and Thesis Requirements

Code	Title	Hours
"PHS 815	Masters Research"	6
PHS 816	Masters Thesis	3
	<b>Total Hours</b>	<b>9</b>

A student should also meet the following requirements:

1. Minimum of one presentation at a national research meeting
2. Submission of one research paper to indexed-refereed journal
3. Successful public defense of thesis