

Degree Requirements and Core Curriculum for the Graduate Program in Pharmaceutical Sciences

Pharmaceutical Sciences Required Core Curriculum

Current Curriculum
GSBS 5101 Responsible Conduct of Research (1)
GPSC 5230 Experimental Design and Biostatistics (2)
GPSC 5250 Applied Medicinal Chemistry (2)
GPSC 5349 Pharmaceutics (3)
GPSC 5404 Principles of Drug Structure and Action (4) – Prerequisite: Biochemistry
GPSC 5410 General Biochemistry (4)
GPSC 5429 Basic Pharmacokinetics (4)
GPSC 5435 Physiology-based Pharmacology (4) – Prerequisite: Principles of Drug Action
GPSC 7101 Pharmaceutical Sciences Seminar (1 ea semester of enrollment) (8 hrs)

Ph.D. Requirements

Ph.D. candidates are required to complete:

$$\text{Didactics (48 hrs) + Research (12 hrs) + Dissertation (12 hrs) = Total (72 hrs)}$$

Ph.D. candidates must complete the Core Curriculum for the Pharmaceutical Sciences Program (approximately 32 hours including **Pharmaceutical Sciences Seminar in fall and spring**. Enrolling in the Seminar is required as long as the student is in the program. Ph.D. students must take an additional 16 hours (minimum) of elective didactic course work to complete the 48 hours of required didactic courses. Students will be allowed to take a maximum of 3 credit hours of Independent Study for didactic credit in place of an elective *after their first two years of study* have been completed.

Students who are assigned to a lab for their doctoral research will be allowed to take one rotation outside of their assigned lab for didactic elective credit. But this rotation must be approved by the student's advisor. A rotation within the assigned lab is considered research and would not count toward didactic credit.

Students entering in the fall term should take core curriculum in the following order:

	<u>Fall</u>	<u>Spring</u>
1 st Year	Biochemistry (4) Experimental Design and Biostatistics (2) Responsible Conduct of Research (1) Pharm Sci Seminar (1)	Applied Medicinal Chemistry (2) Pharmaceutics (3) Principles of Drug Structure and Action (4) Pharm Sci Seminar (1)
2 nd Year	Physiology-based Pharmacology (4) Pharm Sci Seminar (1)	Basic Pharmacokinetics (4) Pharm Sci Seminar (1)

Students entering in the spring term may begin the program with Research and Seminar, then pick the schedule up in the fall with Biochemistry.

Any requests for exceptions to the Core Curriculum for the Pharmaceutical Sciences Department as outlined for the Ph.D. degree must be submitted to the Graduate Program Advisor by the student and their major advisors. The Graduate Program Advisor will make final decisions for such requests in consultation with Core Course Team Leaders who will ascertain the student's knowledge of the required material.

Master's Requirements

Master's candidates are required to follow the Core Curriculum for the Pharmaceutical Sciences Department as outlined for the Ph.D. degree, with the following adjustments for the shorter time of study and hours required for the M.S. degree:

Master's candidates are required to complete:

$$\text{Didactics (27 hrs) + Research (7 hrs) + Thesis (6 hrs) = Total (40 hrs)}$$

Of the 27 didactic hours necessary to complete a Masters degree, candidates are required to complete the following Core Curriculum courses:

Current Curriculum	
GSBS 5101 Responsible Conduct of Research (1 cr)	
GPSC 5230 Experimental Design and Biostatistics (2 cr)	
GPSC 5250 Applied Medicinal Chemistry (2)	
GPSC 5307 Pharm Sci Res Methods (3 cr)	
GPSC 5349 Pharmaceutics (3 cr)	
GPSC 5404 Principles of Drug Structure and Action (4) – Prerequisite: Biochemistry	
GPSC 5410 Biochemistry (4 cr)	
GPSC 5429 Basic Pharmacokinetics (4 cr)	
GPSC 7101 Pharmaceutical Sciences Seminar (4 cr)	

Students entering in the fall term should take the core curriculum in the following order:

1st Year	Fall	Spring
	Biochemistry (4)	Applied Medicinal Chemistry (2)
	Responsible Conduct of Research (1)	Pharmaceutics (3)
	Pharm Sci Res Methods (3)	Principles of Drug Structure and Action (4)
	Pharm Sci Seminar (1)	Pharm Sci Seminar (1)
2nd Year	Experimental Design and Biostatistics (2)	Basic Pharmacokinetics (4)
	Research (8)	Thesis (6)
	Pharm Sci Seminar (1)	Pharm Sci Seminar (1)

Any requests for exceptions to the Core Curriculum for the Pharmaceutical Sciences Department as outlined for the M.S. degree must be submitted to the Graduate Program Advisor by the student and their major advisor. The Graduate Program Advisor will make decisions for such requests in consultation with Core Course Team Leaders who will ascertain the student's knowledge of the required material.