



## Renewed PharmD Curriculum - Research Scholars Concentration

The Research Scholars concentration is offered to students selecting to complete a focused curriculum aimed at development of research related knowledge and skills. Students are selectively offered a position in Research Scholars based on application in the P1 year (See the Research Scholars [timeline](#).) Students complete a longitudinal research project as part of the program. Students will take specific courses (indicated by green shading) totaling 11 credit hours, with six of those credits taken in place of professional electives required in the Pharm.D program.

### First Professional Year

Course No.	Course Name	Credits	Prerequisites
<b>FALL P-1</b>			
PHA 4105	Pathophysiology I	3	P1 Standing
PSC 4115	Pharmaceutics I	3	P1 Standing
PSC 4125	Introduction to Pharmaceutical Sciences: Medicinal Chemistry / Pharmacology / Immunology	3	P1 Standing
PHA 4125	Drug Literature and Foundations of Research	3	P1 Standing
PPR 4115	Social Administrative Sciences and Professional Development I: Introduction to the Pharmacy Profession	2	P1 Standing
	Semester Credit Hours	14	
<b>WINTER P-1</b>			
PHA 4205	Pathophysiology II	2	PHA 4105 P1 Standing
PSC 4215	Pharmaceutics II	2	PSC 4115 P1 Standing
PSC 4225	Autonomic Pharmacology	2	PSC 4125 P1 Standing
PHA 4225	Principles of Pharmacotherapy I: Respiratory, Gastroenterology, Allergy, Ophthalmology, and Basic Self-Care	4	PHA 4105 P1 Standing
PHA 4235	Pharmacotherapeutic Problem Solving I: Respiratory, Gastroenterology, Allergy, Ophthalmology, and Basic Self-Care	2	P1 Standing
PPR 4245	Patient Care Lab I	1	P1 Standing
PPR 4255	Social Administrative Sciences and Professional Development II: Healthcare Systems and Social Aspects of Pharmacy	2	P1 Standing
	Semester Credit Hours	15	
<b>SPRING P-1</b>			
PPR 4315	Pharmacy Jurisprudence	2	P1 Standing
PPR 4365	Introductory Pharmacy Practice Experience I	1	P1 Standing
PHA 4395	Research Scholars: Research Development	2	Research Scholars only
	Semester Credit Hours for Research Scholars	5	
	P-1 Minimum Accumulated Credits	34	

**Bachelor of Health Sciences with a concentration in Pharmaceutical Sciences awarded for students who have completed a minimum of 120 credit hours and a minimum of 30 credit hours at WSU.**

**The Research Scholars program requires completion of PHA 4395 in Spring P1. Between Fall P2 and Winter P3, a total of four credit hours of Research Scholars elective (PHA 5195) must be taken, in any combination of one to four credit hours. Students are not required to take PHA 5195 every semester. The scheduling of a total of four credits hours will be agreed upon with the faculty research mentor and the Research Scholars program director and documented in the student's individual development plan.**

## Second Professional Year

Course No.	Course Name	Credits	Prerequisites
<b>FALL P-2</b>			
PSC 5115	Pharmacokinetics	2	P2 Standing
PHA 5115	Principles of Pharmacotherapy II: Nephrology, Cardiology	5	P2 Standing
PHA 5125	Principles of Pharmacotherapy III: Endocrinology, Gynecology, Urology	4	P2 Standing
PHA 5135	Pharmacotherapeutic Problem Solving II: Nephrology, Cardiology, Endocrinology, Gynecology, Urology	2	P2 Standing
PPR 5145	Patient Care Lab II	1	P2 Standing
PPR 5155	Social Administrative Sciences and Professional Development III: Practice Management	2	P2 Standing
PPR 5165	Introductory Pharmacy Practice Experience II	1	P2 Standing
	Minimum Semester Credit Hours	17	
<b>WINTER P-2</b>			
PPR 5215	Applied Pharmacokinetics and Pharmacogenomics	2	PSC 5115 P2 Standing
PHA 5215	Principles of Pharmacotherapy IV: Infectious Diseases	4	P2 Standing
PHA 5225	Principles of Pharmacotherapy V: Neurology, Psychiatry	4	P2 Standing
PHA 5235	Pharmacotherapeutic Problem Solving III: Infectious Diseases, Neurology, Psychiatry	2	P2 Standing
PPR 5245	Patient Care Lab III	1	P2 Standing
PPR 5255	Social Administrative Sciences and Professional Development IV: Medication Use Process – Pharmacist Responsibility	2	P2 Standing
PPR 5265	Introductory Pharmacy Practice Experience III	1	P2 Standing
PHA 5195	Research Scholars Elective *	(1-4)	Research Scholars only
	Minimum Semester Credit Hours	16	
	Minimum P-2 Year Credits	33	
	Minimum Accumulated Credits for Students in Research Scholars Program	67	
<b>SPRING/SUMMER P-2</b>			
PHA 5195	Research Scholars Elective *	(1-4)	Research Scholars only

- \* **Between Winter P2 and Winter P3, a total of four credit hours of Research Scholars Elective (PHA 5195) must be taken, in any combination of one to four credit hours. Students are not required to take PHA 5195 every semester. The scheduling of a total of four credits hours will be agreed upon with the faculty research mentor and the Research Scholars program coordinator and documented in the student's individual development plan.**

### Third Professional Year

Course No.	Course Name	Credits	Prerequisites
<b>FALL P-3</b>			
PHA 6125	Principles of Pharmacotherapy VI: Oncology, Advanced Immunology	3	P3 Standing
PPR 6115	Applied Therapeutics in Self-Care	2	P3 Standing
PHA 6135	Pharmacotherapeutic Problem Solving IV: Oncology and Advanced Pharmacotherapeutics	3	P3 Standing
PPR 6145	Patient Care Lab IV	1	P3 Standing
PPR 6155	Social Administrative Sciences and Professional Development V: Pharmacy Practice Development	3	P3 Standing
PPR 6165 PPR 6175**	Community Introductory Pharmacy Practice Experience OR Hospital Introductory Pharmacy Practice Experience	2	P3 Standing
PHA 5195	Research Scholars Elective *	(1-4)	Research Scholars only
	Minimum Semester Credit Hours	14	
<b>WINTER P-3</b>			
<i>First seven-week block</i>			
PHA 6235	Pharmacotherapeutic Problem Solving V: Drug Induced Diseases	2	P3 Standing
<i>Second seven-week block</i>			
PPR 6295	Clinical Capstone	2	P3 Standing
<i>Courses taken for entire semester</i>			
PPR 6235	Social Administrative Sciences and Professional Development VI: Public Health and Population Based Care	2	P3 Standing
PPR 6245	Pharmacy Ethics and Professional Responsibility	2	P3 Standing
PSC 6285	Pharmacy Seminar (Research Scholars Section)	1	P3 Standing
PPR 6165 PPR 6175**	Community Introductory Pharmacy Practice Experience OR Hospital Introductory Pharmacy Practice Experience	2	P3 Standing
PHA 5195	Research Scholars Elective *		Research Scholars only Must have completed 4 credit hours of PHA 5195 by end of term
	Minimum Semester Credit Hours	11	
	Minimum P-3 Year Credits	25	
	Accumulated Credits for Program	96	

\* **Between Winter P2 and Winter P3, a total of four credit hours of Research Scholars elective (PHA 5195) must be taken, in any combination of one to four credit hours. Students are not required to take PHA 5195 every semester. The scheduling of a total of four credits hours will be agreed upon with the faculty research mentor and the Research Scholars program coordinator and documented in the student's individual development plan.**

\*\* **PPR 6165 and PPR 6175 are offered both semesters of the P-3 year with half of students alternating between each course.**

## Fourth Professional Year

Course No.	Course Name	Credits	Prerequisites
<i>Students must complete five (5) required courses and two (2) elective courses over the academic year.</i>			
PPR 7410	Advanced Practice Patient Care 1 (Inpatient Acute Care)	4	P4 Standing
PPR 7420	Advanced Practice Patient Care Core	4	P4 Standing
PPR 7430	Ambulatory Care	4	P4 Standing
PPR 7550	Advanced Practice General Hospital	4	P4 Standing
PPR 7560	Advanced Practice General Community	4	P4 Standing
PPR 7530 (Patient care) PPR 7540 (Non-Patient care)	Advanced Practice Elective (Patient Care or Non-Patient Care)	4	P4 Standing
PPR 7195	Advanced Practice Elective Advanced Research Scholars Elective	4	Research Scholars only
	Total Credits for Year	28	
	Accumulated Credits for Program	124	