

Health Services and Outcomes Research PhD Graduate Program Curriculum Map

Available at: <https://pharmacy.hsc.wvu.edu/pharmaceutical-systems-and-policy/phd-program-in-health-services-and-outcomes-research/information-for-current-students/curriculum-by-semester/>

Curriculum by Semester

Fall Semester – First Year	Spring Semester – First Year	Summer Semester – First Year
BIOS 601 Applied Biostatistics Credit Hours-4	BIOS 603 Applied Biostatistics II Credit Hours – 3	CTS 620 Scientific Manuscript Writing and Publishing Summer Semester 2025
PHAR 758 Ethical and Regulatory Aspects of Clinical Research Credit Hours-2	PHAR 754 or PHAR 786 Decision Analysis in Healthcare or Health Services Research Secondary Database Credit Hours – 3	
BMS 700 Scientific Integrity	PHAR 753 or PHAR 756 Social and Behavioral Theory in Health Sciences Outcomes Research or Health Survey Research Methods Credit Hours– 3	
PHAR 755 or Phar 785 Pharmacoeconomics or Pharmacoepidemiology Credit Hours– 3	PHAR 788 Graduate Seminar (required every semester) Credit Hours– 1	
PHAR 777 Health Outcomes Research Designs Credit Hours– 2	Electives Credit Hours – 0 to 3	
PHAR 788 Graduate Seminar (Required every semester) Credit Hours– 1		
PHAR 729 SAS Credit Hours– 2		
Electives Credit Hours– 0 to 3		

Fall Semester – Second Year	Spring Semester – Second Year
PHAR 755 or PHAR 785 Pharmacoeconomics or Pharmacoepidemiology Credit Hours – 3	PHAR 754 or PHAR 786 Decision Analysis in Healthcare or Health Services Research Secondary Database Credit Hours – 3
PUBA 670 Health Systems Credit Hours – 3	PHAR 753 or PHAR 756 Social and Behavioral Theory Outcomes research or Health Survey Research Methods Credit Hours – 3
PHAR 769 Advanced Health Services Research Methods Credit Hours – 3	PHAR 757 Patient Reported Outcomes Credit Hours – 3
PHAR 788 Graduate Seminar (required every semester) Credit Hours – 1	PHAR 788 Graduate Seminar (required every semester) Credit Hours – 1

Electives Credit Hours – 0 to 6	Electives Credit Hours – 0 to 3
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Summer – Either Year, Fall Semester, and/or Spring Semester
PHAR 797 Research Credit Hours – 1 to 6
PHAR 795 Research – Independent Credit Hours – 1 to 15
PHAR 768 Internship – HEOR/HSOR internship Credit Hours – 1 to 6
Electives Credit Hours – 1 to 6

ELECTIVES						
HSOR	Quantitative Emphasis	Behavioral Emphasis	Health Policy Emphasis	Epidemiology Emphasis	Disease	Healthcare Administration
PHAR 774 Managed Care and Principles	PHAR 768 HEOR/HSOR Internship Credit Hours - 4-12 Quantitative Emphasis	SBHS 612 Intervention Design Credit Hours - 3	HPML 601 Foundations of Health and Policy Credit Hours – 3	EPID 610 Principles of Epidemiology Credit Hours - 3	CHPR 380 Women and Health Credit Hours - 3	PUBA 671 Health Care Organization/Operation Credit Hours - 3
	BIOS 604 Applied Biostatistics III Credit Hours - 3	SBHS 613 Program Evaluation for the Health Sciences Credit Hours - 3	HPML 622 Analytic Methods for Health Policy, Management, and Leadership Credit Hours - 3	EPID 664 Chronic Disease Epidemiology Credit Hours - 3	SBHS 634 Issues in Women's Health Credit Hours - 3	PUBA 672 Health Care Finance Credit Hours - 3
	BIOS 610 Intermediate Biostatistics Credit Hours - 4	SBHS 614 Community-Based Participatory Research Methods Credit Hours - 3	HPML 624 Policy Tools for Improving Population Health Credit Hours - 3	EPID 712 Quantitative Method in Epidemiology Credit Hours - 3	EPID 767 Maternal and Child Health Epidemiology Credit Hours - 3	PUBA 673 Alternative Healthcare Delivery Systems Credit Hours - 1
	BIOS 611 Data Management and Reporting Credit Hours - 3	SBHS 712 Qualitative Research Methods Credit Hours - 3 Health Policy Emphasis	HPML 670 Policy Analysis for Population Health Credit Hours - 3	EPID 761/762 Cardiovascular Epidemiology/Cancer Epidemiology Credit Hours - 3	SBHS 633 Women and Violence Credit Hours - 3 Health Care Administration	PUBA 674 Rural Healthcare Credit Hours - 1

	BIOS 612 Statistical Inference Credit Hours - 3		HPML 671 Data Informatics for Population Health and Policy Analysis Credit Hours - 3 Epidemiology Emphasis	EPID 764 Mind, Body, Medicine, and Chronic Illness Credit Hours - 3 Disease Emphasis		PUBA 675 Organization Performance Improvement Credit Hours - 1
	BIOS 620 Applied Linear Models Credit Hours - 3					PUBA 774 Health Care Law and Ethics Credit Hours - 1
	BIOS 621 Categorical Data Analysis for the Health Sciences Credit Hours - 3					PUBA 775 Healthcare Policy Credit Hours - 1
	PSYC 711 Advanced Multivariate Statistics Credit Hours - 3 Behavioral Emphasis					PUBA 776 Healthcare Planning/Marketing Credit Hours - 1