

Doctor of Pharmacy (Pharm.D.) Curriculum^{ab}

Class of 2029

First Professional Year – Fall 2025		Total Credits: 17
PHPS 700	Principles of Drug Action I Discussion of chemical and physical properties relating to drug action. Emphasis on absorption, distribution, metabolism, and elimination of drugs, receptors theory, and mechanisms of action.	4.0
PHPS 702	Biochemical Principles for Pharmacy Addresses chemical and molecular biology basis for drug action and human diseases. Biochemical pathways, enzyme structure and regulation, metabolism of nutrients and food constituents covered.	3.0
PHPS 704	Biopharmaceutics and Drug Delivery I Addresses drug absorption process, Fickian mass transport concepts and mathematical models. Common dosage forms and delivery systems are also presented.	2.0
PHAS 708	Health Care Systems Examines the financing, and delivery of the U.S. healthcare system, introduces the concepts of health outcomes, population-based care, and social/economic factors that impact patient care.	3.0
PHPR 711	Drug Information Focuses on drug information resources and medication safety. Emphasis is on developing abilities to retrieve literature and utilize resources for pharmacy practice.	1.0
PHAS 716	Ethical Issues in Health Care The course is structured as an interprofessional course where pharmacy students will collaborate with dental students to discuss ethical issues encountered in health care.	1.0
PHPR 718A	Pharmacy Skills Lab I Will focus on the development of pharmacy practice skills, utilizing the pharmacist patient care process model.	1.0
PHEP 719A	Personal and Professional Development I One of six-course sequence where students gain personal and professional skills and participate in experiential learning necessary in their development as well-rounded healthcare professionals.	2.0

^a Subject to change per recommendations by Curriculum Committee

^b The normal academic load is indicated for each semester. Students may be permitted to take more than these credits with approval of the Office of Academic Affairs and the Pharmacy Advisor.

First Professional Year – Spring 2026

Total Credits: 18

PHPS 701	Principles of Drug Action II Addresses toxicology and mechanisms of drug actions in endocrine and cardiovascular systems. Emphasis is placed on anatomy and physiology, disease states, and drug actions.	2.0
PHPS 705N	Biopharmaceutics and Drug Delivery II Addresses drug product preformulation, formulation, and manufacture including influence on patient product performance. Physicochemical factors relevant to drug administration, problem solving, and patient counseling emphasized.	3.0
PHPS 707N	Pharmacy Calculations Addresses the mathematical skills necessary for pharmacy practice.	1.0
PHPR 710	Biomedical Literature Evaluation Addresses process of critically reviewing biomedical and pharmaceutical literature by analyzing statistics and research design. Principles of outcomes research covered. Prerequisite: open to pharmacy students only or by consent of department chair.	3.0
PHPS 712	Immunology and Immunization Training A study of principles of immunology, host responses to microbial infections/tumors, allergic reactions, autoimmune diseases, transplantations and appropriate vaccination strategies to improve public health.	3.0
PHPR 713N	Self Care & Alternative Medicines Study of nonprescription medicines and dietary supplements used for self-care. Emphasis will be placed on selection of the appropriate nonprescription medication and patient counseling.	3.0
PHPR 717	Patient-Centered Communication Focuses on the development of patient and provider communication skills within health care settings.	1.0
PHPR 718B	Pharmacy Skills Lab II Will focus on the development of pharmacy practice skills, utilizing the pharmacist patient care process model.	1.0
PHEP 719B	Personal and Professional Development II One of six-course sequence where students gain personal and professional skills and participate in experiential learning necessary in their development as well-rounded healthcare professionals.	1.0

Second Professional Year – Fall 2026		Total Credits: 19
PHPS 720N	Pharmacokinetics Addresses mathematical and clinical basis for understanding drug absorption, distribution, metabolism, and elimination. The mathematical modeling for determining patients' drug dosage regimen is covered.	3.0
PHAS 728N	Pharmacy Management I Addresses pharmacy communication theory, the management of human resources and leadership principles that are useful in maximizing pharmacy operations.	2.0
PHPT 730A	Integrated Pharmacotherapeutics I Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPT 730B	Integrated Pharmacotherapeutics II Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPR 735N	Physical Assessment and Patient Care Skills Develops physical assessment, laboratory test interpretation and patient care skills for drug therapy and disease state management.	2.0
PHPR 738A	Pharmacy Skills Lab III Will focus on the development of pharmacy practice skills, utilizing the pharmacist patient care process model.	1.0
PHEP 739A	Personal and Professional Development III One of six-course sequence where students gain personal and professional skills and participate in experiential learning necessary in their development as well-rounded healthcare professionals.	3.0

Second Professional Year – Spring 2027		Total Credits: 18
PHPS 703	Principles of Pharmacogenomics Addresses techniques of molecular biology and pharmacogenomic principles applied to human disease states. Emphasized pathological states where therapeutic drug intervention exists or might be developed.	2.0
PHAS 709	Health Care and Financial Management Addresses principles of business, marketing, strategic planning, and financial management. The economic and political environment of the American health care system. Prerequisite: open to pharmacy students only or by consent of department chair.	2.0
PHPT 730C	Integrated Pharmacotherapeutics III Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPT 730D	Integrated Pharmacotherapeutics IV Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPR 738B	Pharmacy Skills Lab IV Will focus on the development of pharmacy practice skills, utilizing the pharmacist patient care process model.	1.0
PHEP 739B	Personal and Professional Development IV One of a six-course sequence where students gain personal and professional skills and participate in experimental learning necessary in their development as well-rounded healthcare professionals.	3.0
PHPR 744	Health Promotion & Literacy Prepare to provide care to a diversity of individuals by understanding and respecting differences including attention to health literacy concerns.	2.0

Third Professional Year – Fall 2027

Total Credits: 19c

PHAS 733N	Pharmacy Law Covers legal requirements in pharmacy practice and helps students apply laws to circumstances they may encounter in various practice settings.	2.0
PHPT 750A	Integrated Pharmacotherapeutics V Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPT 750B	Integrated Pharmacotherapeutics VI Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHAS 756	Pharmacy & Population Health Introduces the concepts of population health, determinants and patterns of population health problems and identifying possible ways to improve population health.	2.0
PHPR 758A	Pharmacy Skills Lab V Will focus on the development of pharmacy practice skills, utilizing the pharmacist patient care process model.	1.0
PHEP 759A	Personal and Professional Development V One of six-course sequence where students gain personal and professional skills and participate in experiential learning necessary in their development as well-rounded healthcare professionals.	1.0
	Elective Courses	5.0^c

^c Total credits vary depending on number of elective credits taken. Students are required to accumulate a total of 10 elective credits for graduation. Students enrolled in a concurrent degree program should contact their advisor prior to enrolling in electives.

Third Professional Year – Spring 2028

Total Credits: 18^d

PHEP 751	Essentials of Research Application Review of basic research principles (from idea creation to writing conclusion) in preparation for the Advanced Pharmacy Practice Experience (APPE) research application rotation.	1.0
PHAS 754	Pharmacy Management II Introduction to leadership and management activities and resource use in the community, institutional and other pharmacy practice settings. Developing problem-solving abilities will be emphasized.	2.0
PHPT 750C	Integrated Pharmacotherapeutics VII Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPT 750D	Integrated Pharmacotherapeutics VIII Integrates concepts of pathophysiology, pharmacology, medicinal chemistry and therapeutics. Students are expected to design, implement, monitor, evaluate, and adjust pharmaceutical care plans for patients.	4.0
PHPR 758B	Pharmacy Skills Lab VI Will focus on the development of pharmacy practice skills, utilizing the pharmacist patient care process model.	1.0
PHEP 759B	Personal and Professional Development VI One of six-course sequence where students gain personal and professional skills and participate in experiential learning necessary in their development as well-rounded healthcare professionals.	1.0
	Elective Courses	5.0^c

Fourth Professional Year – Summer 2028, Fall 2028, Spring 2029 Total Credits: 45^e

PHEP 780	Advanced Pharmacy Practice Experience: Community Pharmacy To place students in a community pharmacy practice environment where they can apply their didactic knowledge, develop core competencies, and gain patient care experience.	6.0
PHEP 781	Advanced Pharmacy Practice Experience: Hospital Pharmacy To place students in a hospital practice environment where they can apply their didactic knowledge, develop core competencies, and gain patient care experience.	6.0
PHEP 782	Advanced Pharmacy Practice Experience: Ambulatory Care To place students in an ambulatory care practice environment where they can apply their didactic knowledge, develop core competencies, and gain patient care experience.	6.0
PHEP 783	Advanced Pharmacy Practice Experience: Acute Care/General Medicine To place students in an acute care setting where they can apply their didactic knowledge, develop core competencies, and gain patient care experience.	6.0
PHEP 784	Advanced Pharmacy Practice Experience: Specialized Practice.^d To place students in a specialized practice environment where they can apply their didactic knowledge, develop core competencies, and gain practical experience.	6.0^d
PHEP 789	Advanced Pharmacy Practice Experience: ImPaCT (Improving Patient Care for Tomorrow) The ImPaCT experience requires the student to develop and complete a scholarly pharmacy related project.	3.0

Doctor of Pharmacy Curriculum

Total Credits: 154

^d Must repeat PHEP 784 to accumulate 18 credit hours.