

DOCTOR OF PHARMACY (PHARM D)

Vision Statement

The College of Pharmacy at Marshall B. Ketchum University will be a recognized innovator and provider of distinctive, highest quality, evidence-based education, research, and collaborative pharmacy practice.

Mission

The mission of COP at MBKU is to educate individuals to become ethical and compassionate pharmacists who competently deliver patient-centric services in diverse environments and systems of healthcare, with a commitment to innovative scholarship.

Program Overview

It takes four academic years to complete the Doctor of Pharmacy (PharmD) program. The first-year curriculum provides the foundation for professional practice with instruction on pharmaceutical and biomedical sciences, body systems and disease, epidemiology, public health, pharmaceutical self-care, pharmacy law, and roles of the pharmacist. The curriculum teaches United States and global health care systems, interpersonal and interprofessional communications, pre-clinical laboratory skills, pharmacy practice skills, and provides certifications in immunization and life support. Students will begin Introductory Pharmacy Practice Experiences courses (IPPE).

The second-year curriculum continues to build on the foundation courses from year one with instruction on applied biomedical sciences, pharmacology, clinical medicine, and pharmacotherapeutics. The curriculum teaches professional ethics, behavioral aspects of health, drug information, evidence-based practice, research methodology, biostatistics, pharmacokinetics, and basics of laboratory medicine. Students continue with IPPE courses.

The third-year curriculum continues with focused instruction on the principles of clinical medicine and pharmacotherapeutics. The curriculum incorporates biotechnology, pharmacogenomics, pharmacoeconomics, special populations, and contains a skills lab for clinical and evidence-based reasoning and certification in medication therapy management. The curriculum provides an opportunity for students to complete a doctoral-level research and scholarship project and provides students an opportunity to take three didactic electives of their choice.

The fourth year, also known as the experiential year curriculum lists all the Advanced Pharmacy Practice Experience (APPE) courses. Students will also take APPE electives of their choice. Additionally, the students will be provided North American Pharmacist Licensure Examination (NAPLEX) preparatory course series to assess NAPLEX readiness.

The degree of Doctor of Pharmacy will be conferred on students who are officially admitted to, and who satisfactorily complete the four-year professional curriculum in pharmacy. Satisfactory completion of the PharmD program will academically qualify the graduate to apply for licensure in each of the 50 states.

Admissions

The College of Pharmacy (COP) is committed to accepting a diverse group of qualified individuals from a variety of backgrounds and experiences in accordance with MBKU's nondiscrimination policy.

Criteria

Technical Standards

COP has an ethical responsibility for the safety of patients and to graduate candidates for pharmacy licensure who are competent and capable to meet the essential functions of pharmacy practice. The technical standards established by the college faculty require students to master the physical, cognitive and behavioral capabilities for successful admission, promotion, and graduation. The Accreditation Council for Pharmacy Education requires U.S. colleges and schools of pharmacy to define the technical standards.

All students are held to the same academic and technical standards, with or without reasonable accommodation, to complete all aspects of the professional education program. Disclosure of disabilities is not required; however, students who fail to comply with the standards and do not seek accommodation are in jeopardy of academic failure and possible dismissal. The college encourages consultation with the assistant dean of student services if a student feels the standards cannot be met. Students must be able to accomplish all of the following:

Observation

- Observe lectures, demonstrations, experiments, and practice-based activities in the basic and pharmaceutical sciences.
- Observe physiologic and pharmacological demonstrations, evaluation of microbiological cultures, and microscopic studies of organisms and tissues in normal and pathological states.
- Observe a patient accurately at a distance and close at hand, noting verbal and nonverbal signals.
- Meet the specific vision-related requirements, such as reading information on a computer screen, projected slides, and overheads, reading written and illustrated material, and discriminating numbers and patterns associated with diagnostic and monitoring instruments and tests.
- Evaluate visible patient signs and symptoms for the purposes of monitoring drug therapy.

Communication

- Communicate effectively, sensitively, and rapidly with patients and members of the health care team and convey a sense of compassion and empathy.
- Speak, listen, read, and write in the English language.
- Effectively communicate with instructors and peers.
- Communicate interprofessionally with health care practitioners specifically in reviewing and recommending verbal and written drug therapy orders.
- Elicit information from patients, describe changes in mood, activity, and posture and perceive nonverbal communications.
- Read and record observations and care plans legibly, efficiently, and accurately.
- Complete forms or appropriately document activities according to directions in a complete and timely fashion.

Sensory and Motor Coordination or Function

- Execute all aspects of processing multiple types of drug orders and compounding medications.

- Engage in safe and aseptic handling of sterile preparations.
- Safely and effectively operate appropriate equipment, including but not limited to microscopes, computer keyboards, glucose monitors, and peak flow meters.
- Execute motor movements reasonably required to participate in the general care and emergency treatment of patients.

Intellectual, Conceptual, Integrative and Quantitative Abilities

- Identify three-dimensional relationships and the spatial relationships of structures.
- Solve problems involving measurement, memorization, calculation, reasoning, analysis, synthesis, and evaluation rapidly in a multi-task setting.
- Synthesize knowledge and integrate the relevant aspects of a patient's history, physical findings, and monitoring studies.
- Obtain, retrieve, evaluate, and deliver information in an efficient and timely manner.
- Provide a reasonable explanation and analysis of the problem and determine when additional information is required.

Behavioral and Social Attributes

- Possess the emotional health required for full use of their intellectual abilities, the exercise of good judgment, and the prompt and safe completion of all responsibilities.
- Adapt to change, display flexibility, and learn to function in the face of uncertainties and stressful situations.
- Possess compassion, integrity, interpersonal skills, motivation, empathy, respect, and concern for others.
- Describe the legal and ethical aspects of the practice of pharmacy and function within the guidelines established by the law and by the ethical standards of the pharmacy profession.
- Function effectively in situations of physical and emotional stress.
- Analyze appropriate suggestions and criticism and, if necessary, respond by modification.
- Exercise good judgment and prompt completion of all responsibilities involved in the pharmaceutical care of patients in a sensitive and effective manner.
- Have the capacity to develop professional, mature, sensitive, and effective relationships with patients.
- Develop the skills necessary to instruct and supervise technical personnel assisting with the delivery of pharmaceutical services.

It is our experience that a number of individuals with disabilities, as defined by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, are qualified to study and work as health care professionals and scientists with the use of reasonable accommodations. To be qualified for health sciences programs at MBKU those individuals must be able to meet both our academic standards and the technical standards, with or without reasonable accommodations.

For further information regarding services and resources for students with disabilities and/or to request accommodations, please contact University Student Affairs.

Prerequisites

All requirements must be completed by the time of matriculation at MBKU.

A baccalaureate degree from a regionally accredited college or university, or an equivalent institution as determined by MBKU, is recommended for admission.

All prerequisite courses must be completed at a regionally accredited institution in the U.S. with a grade of "C" or better. Applicants educated outside the U.S. must utilize a transcript evaluation service to verify their degree and coursework. The academic record must show credits and grades equivalent to those given by U.S. institutions of higher learning.

The following courses must be completed at a regionally accredited institution, in the U.S., with a grade of "C" or better prior to enrollment and are the minimum requirements for all applicants.

6 SEMESTER or 9 QUARTER CREDIT HOURS OF EACH OF THE FOLLOWING:

- General Biology (One year sequence, including laboratories)
- General Chemistry (One year sequence, including laboratories)
- Organic Chemistry (One year sequence, including laboratories)

3 SEMESTER or 4 QUARTER CREDIT HOURS OF EACH OF THE FOLLOWING:

- General or Medical Microbiology (Laboratory required)
- Human Anatomy (Laboratory required)
- Human Physiology (Laboratory required)
- Calculus (For science majors preferred)
- General Psychology
- Economics
- Behavioral or social science course
- Communication course

Additionally, 6 Semester Credit Hours or 8 Quarter Credit Hours

- English*
- Waived for students with a verified BA degree

Advanced Placement credits will be accepted for fulfillment of no more than the equivalent of one non-science course of the prerequisite.

The Pharmacy College Admission Test (PCAT) is not required for students with a bachelor's degree. Additional consideration will be given to those with community service, patient care, pharmacy, and/or military experience.

Applicants who earned degrees from foreign institutions must also submit official scores from the Test of English as a Foreign Language, or TOEFL, regardless of the official language of the country in which the education took place or the predominant language of the degree-granting institution. Scores should be sent directly using MBKU Code 4893. Minimum scores are noted below:

Subject	Score
Reading	22/30
Listening	22/30
Speaking	26/30
Writing	24/30

Procedures

All first-time applicants, reapplicants, and those who have been previously enrolled in another pharmacy program must apply through the centralized application service: PharmCAS. Applicants must follow the instructions on how to complete the application, submit transcripts, and submit letters of recommendation. All supplemental application materials will be completed during the applicant interview day.

The Pharmacy College Admission Test (PCAT) is not required, but a high score could enhance an applicant’s chances of admission. If you wish to make available your PCAT scores, please select MBKU as a recipient at the time the exam is taken.

Process

The PharmCAS application cycle begins in July. Applicants must submit their application and college transcripts to PharmCAS by the final application deadline.

Applications are processed as soon as they are verified by PharmCAS. Candidates will be invited for interviews between Fall and Spring quarters. Video conference interviews may be offered under specific circumstances.

Transfer Policy

COP at MBKU only considers transfers for entry into the first or second professional year. Students wishing to transfer from another pharmacy school or college in the U.S. should apply through PharmCAS and must meet the following criteria:

- Be in good academic and disciplinary standing at the transferring institution
- Supply a letter of recommendation and permission from the chief executive officer or designee of the transferring institution
- Supply a letter from each of two full-time members of the faculty of the transferring institution recommending the transfer
- Provide a letter explaining in detail why the transfer is being requested including appropriate documentation that substantiates the reason
- Meet all current admissions requirements and standards of COP
- Supply official transcripts of all collegiate work completed, including that taken at the transferring institution
- Supply course outlines for all Pharmacy coursework for which advanced standing credit is desired
- Submit the appropriate application materials. Decisions on transfer applications are made by the Admissions Committee in cooperation with the Office of Academic Affairs.

Transfer credit will only be granted for courses passed with a “C” or better (must achieve passing score in a Pass/Fail course) and taken in a Doctor of Pharmacy program accredited by the Accreditation Council for Pharmacy Education (ACPE).

Financial Information

Tuition

2023–24 Tuition, Doctor of Pharmacy Program

Annual Tuition & Fees	Full-Time Class Tuition	Class Fee	Mandatory Equipment & Materials	Student Association Fee	Graduation Fee	Total Annual Tuition and Fees
Class of 2024	\$55,640.00	\$45.00	\$48.70	\$70.00	\$115.00	\$55,918.70
Class of 2025	\$55,640.00	\$45.00	NA	\$70.00	NA	\$55,755.00
Class of 2026	\$55,640.00	\$45.00	\$30.00	\$70.00	NA	\$55,785.00
Class of 2027	\$55,640.00	\$45.00	\$412.09	\$70.00	NA	\$56,167.09

Quarterly Tuition & Fees	Summer	Fall	Winter	Spring	Total Tuition and Fees
Class of 2024	\$13,910.00	\$14,025.00	\$13,910.00	\$14,073.70	\$55,918.70
Class of 2025	\$13,910.00	\$14,025.00	\$13,910.00	\$13,910.00	\$55,755.00
Class of 2026	\$13,910.00	\$14,025.00	\$13,910.00	\$13,940.00	\$55,785.00
Class of 2027	NA	\$19,049.40	\$18,546.67	\$18,571.02	\$56,167.09

Tuition for Returning Students Enrolled Less than Full-Time

Fee	Amount
Tuition (less than full-time) per credit hour	\$1,176.01

Fees

Fee	Amount
Annual Parking fee (optional)	\$335

Other Costs

Fee	Amount
Matriculation deposit / PharmD program (paid upon acceptance and credited to Fall Quarter tuition upon enrollment)	\$1,500

Estimates for books, instruments, equipment, supplies, and clinic uniforms for all four professional years are listed below.

Mandatory Equipment and Material Fee Annual Total

Class	Total
Class of 2027	\$412.09
Class of 2026	\$30
Class of 2024	\$48.70

Books/Manual/rotation fee

Fee	Amount
Books/Manual/Rotation Fee	\$500

While the occasion has not previously presented itself, the Board of Trustees of Marshall B. Ketchum University does reserve the right to change the tuition and fees or to establish additional fees for special features or services if deemed necessary.

Curriculum

Course	Title	Hours
First Year		
Fall Quarter		
IPE 401C	Professional Ethics	0.75
IPE 406C	DEI in Healthcare	0.75
PHM 507	Found of Human Body & Diseases I	3.00
PHM 520	Pharmaceutical Sciences I	3.00
PHM 532	Pharmaceutical Biochemistry	2.00
PHM 550	Pharmacy Skills Lab I -Immunization	1.00
PHM 560	Pharmacy Law	2.00
Hours		12.5

Winter Quarter

IPE 403C	Population and Public Health	2.00
PHM 508	Found of Human Body & Diseases II	3.00
PHM 512	Patient Assessment Lab	2.00
PHM 523	Basic Pharmacokinetics	3.50
PHM 553	Pharmacy Skills Lab II - Community	2.00

Hours **12.5**

Spring Quarter

PHM 509	Found of Human Body & Diseases III	2.00
PHM 521	Pharmaceutical Sciences II	3.50
PHM 522	Pharmaceutical Sciences III	4.00
PHM 554	Pharmacy Skills Lab III - Hospital	2.00
PHM 561	Pharmacy Self-Care I	2.00
PHM 581	Medical Spanish	1.00

Hours **14.5**

Second Year**Summer Quarter**

PHM 650	Pharmaceutical Self Care & P Ad II	2.00
PHM 670	IPPE I (4 weeks)	4.00

Hours **6**

Fall Quarter

PHM 601	Int. Pharmacotherapeutics I (ANS)	5.00
PHM 602	Int. Pharmacotherapeutics II (Renal)	5.00
PHM 622	Advanced Compounding & Calculations	2.00
PHM 640	Pharmacy Skills Lab IV -PT Care Pro	1.00
PHM 651	Pharmaceutical Self Care & P Ad III	2.00
IPE 400C	Medical Spanish ¹	2.00
PHM 780	Mental Health First Aid ¹	1.00
PHM 790	Residency Readiness ¹	1.00

Hours **19**

Winter Quarter

IPE 402C	Evidence-Based Practice	2.00
PHM 603	Int. Pharmacotherapeutics III (GI)	5.00
PHM 604	Int. Pharmacotherapeutics IV (Cardio)	6.00
PHM 641	Pharmacy Skills Lab V - Cardio	1.00
PHM 782	Research ¹	2.00
IPE 405C	Preventing Burnout (IPE)	1.00

Hours **17**

Spring Quarter

PHM 605	Int. Pharmacotherapeutics V (Endocrine/ Respiratory)	6.00
PHM 606	Int. Pharmacotherapeutics VI (GU/CNS)	5.00
PHM 610	Drug Info, Informatics & Lit Eval	3.00
PHM 615	Adv Applications in Clin Prac I	1.00
PHM 681	Research & Scholarship	2.00
PHM 789	Pract Apps Stat & Research Design ¹	2.00

Hours **19**

Third Year**Summer Quarter**

PHM 701	Pharmacoeconomics	2.00
PHM 770	IPPE II (4weeks)	4.00

Hours **6**

Fall Quarter

PHM 710	Int. Pharmacotherapeutics VII (Psych)	5.00
PHM 730	Pharmacy Skills Lab VI - Diabetes	1.00
PHM 716	Integrated Pharmacotherapeutic VIII	3.00
IPE 400C	Medical Spanish ¹	2.00
PHM 794	Advance Cardiovascular Life Support (ACLS) ¹	2.00
PHM 790	Residency Readiness ¹	1.00
PHM 780	Mental Health First Aid	1.00

Hours **15**

Winter Quarter

PHM 712	Int. Pharmacotherapeutics IX (ID)	6.00
PHM 713	Int. Pharmacotherapeutics X (ID, etc.)	5.00
PHM 731	Pharmacy Skills Lab VII -Med Therap	1.00
PHM 740	Biotechnology, Pharm, Precision Med	3.00
PHM 782	Research ¹	2.00
PHM 792	Applications Research & Scholarship ¹	1.00
IPE 405C	Preventing Burnout (IPE) ¹	1.00

Hours **19**

Spring Quarter

IPE 404C	Interprofessional Case Conferences	0.75
PHM 714	Int. Pharmacotherapeutics XI (Oncology)	5.00
PHM 715	Adv Applications in Clin Prac II	2.00
PHM 760	Special Populations	2.00
PHM 765	Emerging Iss & Practice Read Exam	4.00
PHM 786	Adv. Topics in Infectious Diseases ¹	2.00
PHM 789	Pract Apps Stat & Research Design ¹	2.00

Hours **17.75**

Fourth Year**Fall Quarter**

PHM 801	APPE: Community Pharmacy Practice	6.00
PHM 802	APPE: Health System Pharmacy	6.00
PHM 803	APPE: Inpatient/Acute Care Gen Med	6.00
PHM 804	APPE: Ambulatory Care Pharmacy	6.00
PHM 805	APPE: Elective Rotation I	6.00
PHM 806	APPE: Elective Rotation II	6.00
PHM 865A	NAPLEX Capstone I	0.25
PHM 865B	NAPLEX Capstone II	0.25
PHM 865C	NAPLEX Capstone III	0.25
PHM 865D	NAPLEX Capstone IV	2.00

Hours **38.75**

Total Hours **197**

¹ Elective Courses

Graduation Requirements

A student will be recommended for the degree of Doctor of Pharmacy provided the candidate:

1. Is not on academic probation, has completed all prescribed academic requirements with a cumulative GPA of 2.0 or higher, has no outstanding incomplete grades, and has a passing grade for all clinical rotations; and

2. Has performed and behaved in a manner that is ethical, professional, and consistent with the practice of pharmacy; and
3. Has satisfactorily passed prescribed exams; and
4. Has completed all degree requirements within six (6) years following initiation of the matriculation process; and
5. Has been recommended for graduation to the Dean by the APPC.

1.

Commencement Awards

Latinized honors are accorded to those students who have excelled scholastically on the following basis:

Latin Honor	GPA
Summa Cum Laude	3.80 - 4.00
Magna Cum Laude	3.60 - 3.79
Cum Laude	3.40 - 3.59

Courses

Courses for Didactic Years (P1-P3)

Code	Title	Hours
PHM 507	Found of Human Body & Diseases I	3
PHM 508	Found of Human Body & Diseases II	3
PHM 509	Found of Human Body & Diseases III	2
PHM 512	Patient Assessment Lab	2
PHM 520	Pharmaceutical Sciences I	3.00
PHM 521	Pharmaceutical Sciences II	3.50
PHM 522	Pharmaceutical Sciences III	4.00
PHM 523	Basic Pharmacokinetics	3.50
PHM 532	Pharmaceutical Biochemistry	2
PHM 550	Pharmacy Skills Lab I -Immunization	1.00
PHM 553	Pharmacy Skills Lab II - Community	2
PHM 554	Pharmacy Skills Lab III - Hospital	2
PHM 560	Pharmacy Law	2.00
PHM 561	Pharmacy Self-Care I	2
PHM 581	Medical Spanish	1.00
PHM 601	Int. Pharmacotherapeutics I	5.00
PHM 602	Int. Pharmacotherapeutics II	5.00
PHM 603	Int. Pharmacotherapeutics III	5.00
PHM 604	Int. Pharmacotherapeutics IV	6.00
PHM 605	Int. Pharmacotherapeutics V	6.00
PHM 606	Int. Pharmacotherapeutics VI	5.00
PHM 610	Drug Info, Informatics & Lit Eval	3.00
PHM 615	Adv Applications in Clin Prac I	1.00
PHM 622	Advanced Compounding & Calculations	2
PHM 640	Pharmacy Skills Lab IV -PT Care Pro	1.00
PHM 641	Pharmacy Skills Lab V - Cardio	1.00
PHM 650	Pharmaceutical Self Care & P Ad II	2.00
PHM 651	Pharmaceutical Self Care & P Ad III	2.00
PHM 670	IPPE I	4.00
PHM 681	Research & Scholarship	2.00
PHM 701	Pharmacoeconomics	2.00
PHM 712	Int. Pharmacotherapeutics IX	6.00

PHM 713	Int. Pharmacotherapeutics X	5.00
PHM 714	Int. Pharmacotherapeutics XI	5.00
PHM 715	Adv Applications in Clin Prac II	2.00
PHM 716	Integrated Pharmacotherapeutic VIII	3
PHM 721	Behavioral & Social Science	2
PHM 730	Pharmacy Skills Lab VI - Diabetes	1.00
PHM 731	Pharmacy Skills Lab VII -Med Therap	1.00
PHM 740	Biotechnology, Pharm, Precision Med	3.00
PHM 760	Special Populations	2.00
PHM 765	Emerging Iss & Practice Read Exam	4.00
PHM 770	IPPE II (4weeks)	4.00
PHM 780	Mental Health First Aid	1.00
PHM 782	Research	2.00
PHM 786	Adv. Topics in Infectious Diseases	2.00
PHM 788	Intro. to Drug Development & Eval	2.00
PHM 789	Pract Apps Stat & Research Design	2.00
PHM 790	Residency Readiness	1.00
PHM 792	Applications Research & Scholarship	1.0
PHM 794	Advance Cardiovascular Life Support	2.00

Courses for Clinical Year P4

Code	Title	Hours
PHM 801	APPE: Community Pharmacy Practice	6.00
PHM 802	APPE: Health System Pharmacy	6.00
PHM 803	APPE: Inpatient/Acute Care Gen Med	6.00
PHM 804	APPE: Ambulatory Care Pharmacy	6.00
PHM 805	APPE: Elective Rotation I	6.00
PHM 806	APPE: Elective Rotation II	6.00

Each student completes six advanced pharmacy practice experiences, each of six weeks duration. These experiences take place in the following practice settings:

- Community Pharmacy
- Hospital or Health System Pharmacy
- Inpatient/Acute Care General Medicine
- Ambulatory Care
- Two Elective Settings

Elective settings include: academia, ambulatory care specialties, compounding, consultant pharmacy, medication therapy management, internal medicine specialties, long-term care, managed care, nuclear medicine, optometric pharmacy, pharmacy administration, pharmaceutical industry, regulatory, research, and specialty pharmacy.

6 x 6-week experiences and 6 h / experience = 36 credits

Prerequisites: Successful completion of prior quarter coursework or program permission.

Code	Title	Hours
PHM 865A	NAPLEX Capstone I	0.25
PHM 865B	NAPLEX Capstone II	0.25
PHM 865C	NAPLEX Capstone III	0.25
PHM 865D	NAPLEX Capstone IV	2.00

Pharmacist Licensure Exam Requalification Program

COP at MBKU offers a requalification program for non-degree-seeking pharmacy graduates. This program is designed to provide pharmacist graduates with the necessary credits to retake the California Practice Standards and Jurisprudence Examination (CPJE) or the North American Pharmacist Licensure Examination (NAPLEX).

Overview & Curriculum

- 24 quarter units (16 semester units) that can be completed within the existing PharmD curriculum
- Requalification students will be enrolled in existing courses along with degree-seeking students
- Complete coursework on campus in a personalized and safe environment
- Each student will work with their academic coordinator to design their individualized curriculum
- Students can take specific courses on topics that are challenging to help them strengthen their skills
- Students may take as many units per quarter as scheduling allows