

Pharmacy, PharmD

To earn the Doctor of Pharmacy degree (PharmD), students must complete two years of preprofessional studies and four years of professional courses at Northeastern University.

Year 1: Preprofessional Studies (PP1)

Year 2: Preprofessional Studies (PP2)

Year 3: Professional Year 1 (P1)

Year 4: Professional Year 2 (P2)

Year 5: Professional Year 3 (P3)

(Student earns the Bachelor of Science in Pharmacy Studies degree and moves to the graduate level for completion of PharmD studies.)

Year 6: Professional Year 4 (P4)

The PharmD fully integrates campus-based learning with experiential learning, including the university's signature cooperative education program, to provide students with the knowledge, skills, and abilities necessary to succeed in the pharmacy profession. Our students promote and ensure the safe and effective use of drugs and provide medication therapy management services. In addition to preparing and dispensing prescribed medications, our students provide information to patients about medications and their uses; advise physicians, other prescribers, and healthcare practitioners on medication selection, dosages, interactions, and adverse effects; and monitor patient responses to drug therapy.

Our students are well equipped to provide patient care services in a variety of settings. Most of our graduates work in community pharmacies or in healthcare facilities such as hospitals and ambulatory clinics. Additional practice opportunities exist in health maintenance organizations, private practice groups, long-term-care facilities, home healthcare, the Public Health Service, the armed services, and law enforcement and regulatory agencies such as the Federal Drug Administration or Drug Enforcement Administration. Graduates may also find employment in drug development, marketing and research within the pharmaceutical industry, colleges of pharmacy, and professional association management. In addition, many of our graduates go on to pharmacy practice residencies, fellowships, and leading graduate programs.

Doctor of Pharmacy students are admitted with the expectation that by working with faculty, staff, and each other, they will develop the knowledge, skills, and attitudes necessary for academic and professional success. Students follow academic progression plans for their respective years of graduation. Any deviation from the prescribed curriculum will require faculty/staff permission and an approved plan of study from the School of Pharmacy and Pharmaceutical Sciences Academic Standing Committee.

The curriculum includes both Introductory Pharmacy Practice Experiences (IPPEs, fulfilled by cooperative education) and Advanced Pharmacy Practice Experiences (APPEs). These pharmacy practice experiences (PPEs) are provided primarily under the direct supervision of qualified pharmacist preceptors and occasionally with other qualified healthcare professionals. The school is affiliated with many world-class practice sites throughout the United States, providing students with access to experienced clinicians and scholars. Although every effort is made to accommodate individual circumstances and requests, students should be prepared to travel outside the Boston area to complete some of their PPEs. Availability of a car may be required, as some sites are not accessible by public transportation. All expenses associated with PPEs, including travel and housing, are the responsibility of the student.

IPPEs are competitive placements that are based on job availability in a geographic region. The placements are facilitated by School of Pharmacy and Pharmaceutical Sciences cooperative education coordinators. Students are required to earn satisfactory (S) grades in one IPPE in a community setting and in one IPPE in an institutional/hospital practice setting.

APPE placements are provided based on site/preceptor availability and the final approval of the School of Pharmacy and Pharmaceutical Sciences Office of Experiential Education. Students may be able to petition the OEE for special-arrangement APPEs; however, availability for such requests is limited.

To be eligible for a Doctor of Pharmacy degree, a student must successfully complete all courses in the curriculum including the IPPEs (co-op) and APPEs; meet the academic progression standards of the program; meet the technical standards of the program; and satisfy all other requirements as stated. The pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education (<https://www.acpe-accredit.org/>) and adheres to the standards established by ACPE.

Pharmacy graduates must meet specific requirements to qualify for professional licensure in the state where they plan to practice as a registered pharmacist. These requirements include graduating from an accredited school of pharmacy, passing national and state board examinations, and completing internship hours. The internship is a period of practical experience conducted under the supervision of a registered pharmacist. Massachusetts requires 1,500 internship hours, all of which are satisfied through completion of IPPEs (co-op) and APPEs.

Professional and/or legal exigencies arise from time to time, which may necessitate changes in a pharmacy course, progression, and/or graduation requirements. Students should review their status with academic advisors on a timely basis and refer to current publications for updated information.

Program Progression

A minimum grade of C is required in major prerequisite courses (those identified with the subject codes BIOL, CHEM, MATH). To progress into the subsequent year of professional courses, students must have completed all professional prerequisites with the required minimum passing grade, have satisfactorily completed all academic courses in the preprofessional phase of the curriculum, have a preferred overall GPA of 3.000 or higher, and a preferred science prerequisite GPA of 3.000 or higher. The science GPA is comprised of all courses with prefixes BIOL, CHEM and MATH. In addition, to progress into the first professional year of the PharmD program (P1), students must demonstrate good verbal and written communication skills, understanding of the pharmacy profession, and commitment to patient care through an interview process based on criteria set by the School of Pharmacy and Pharmaceutical Sciences.

All students entering P1 in fall 2022 and beyond are required to complete the PharmCAS application. The PharmCAS application process is considered a formality in the progression process and will not jeopardize the student's preferred or guaranteed enrollment status.

To progress into the subsequent semester of professional courses, students must receive a grade of C or better in all PHMD and PHSC courses, as well as in any course completed to fulfill the professional elective requirement.

Pharmacy (PharmD-UG) students must maintain an overall GPA of 3.000 or higher during the professional years (P1–P4) of the Doctor of Pharmacy program.

Requirements for the PharmD Pharmacy PPEs

Requirements for the successful completion of the PharmD PPEs include:

1. Evidence of health clearance from University Health and Counseling Services before placements at any PPE site.
2. Satisfactory completion of any additional site-specific requirements including, but not limited to, criminal record information (CORI), urine drug screens, and verification of immunization status. All fees associated with these requirements are the responsibility of the student. Please see below for management of positive urine drug screens.
3. Adherence to the school's code of professional conduct and the university's code of conduct policies while off-campus.
4. Maintenance of an active pharmacy intern license in every state where the student completes an experience.
5. Compliance with site-specific requirements (via site descriptions) and completion of site requests within specified deadlines. Students who fail to complete these requirements as directed will likely incur grade penalties and may experience a delay of graduation or dismissal from the pharmacy program.

Management of Positive Urine Drug Screens

If the student learns the urine drug screen (test #1) is positive, the student will notify the OEE (pharmacyoe@northeastern.edu) and immediately complete a second urine screen (test #2). A professional concern form will be completed based on test #1 results and reported to the University's Office of Student Conduct and Conflict Resolution via the Incident Report form (IRF).

- If urine screen test #2 is negative (-), the student will be allowed to continue the PPEs. However, the student will be asked to complete a random urine screen (test #3) at a time determined by the OEE. If urine screen test #3 is positive (+), the student will be administratively removed from the active PPEs and graduation may be delayed. A second professional concern form and OSCCR IRF will be completed, based on test #3 results. The return to PPEs will occur once a repeat urine test is negative. That repeat negative test will be followed up by a random urine screen at a time determined by the OEE.
- If urine screen test #2 is positive (+), the student will be administratively removed from the PPEs and graduation may be delayed. The return to PPEs will occur once a repeat urine screen is negative. That negative screen will be followed up by a random urine screen at a time determined by the OEE. A second professional concern form will be completed based on a positive test #3 result.

Program Policies

Students are expected to adhere to the policies and standards of their program major, as stated, to progress through their curriculum as planned. Students seeking any exceptions to the program policies and standards specified for their program major must present a petition before the School of Pharmacy and Pharmaceutical Sciences Academic Standing Committee.

Given programmatic requirements, coupled with concerns over the loss of therapeutic knowledge, requests for a General Leave of Absence (<https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/leaves-of-absence-withdrawal/>), other than Medical or Emergency Leave of Absence:

- Must comply with all stated Northeastern general policies, regardless of the academic year.
- May be made at any time period during the P1 or P2 years.
- During the P3 academic year, any request for a general leave must be made no later than February 1 of the given academic year. Requests after this date will not be permitted.
- During the P4 academic year, requests for a general leave cannot be made at any time.

SOPPS Professional Code of Conduct

All SOPPS students (i.e., preprofessional PharmD, Pharmaceutical Sciences, BS, P1–P4 PharmD, MS, PhD) are expected to adhere to the SOPPS–Professional Code of Conduct.

Technical Standards for the Doctor of Pharmacy Program

The PharmD program at Northeastern is a rigorous and challenging academic program that requires students to possess specific characteristics and abilities within the cognitive, affective, and psychomotor domains, referred to here as technical standards. To successfully progress in and ultimately complete the didactic, laboratory, and experiential components of the PharmD program, students must meet the standards described below.

INTELLECTUAL ABILITIES

Students must have well-developed problem-solving and critical-thinking skills. Cognitive function must be appropriate to integrate, evaluate, and apply information gained through measurement, analysis, calculation, and reasoning. Students must have the capacity to learn efficiently in classroom, laboratory, small group and experiential settings, and through independent study. Students are required to demonstrate the ability to integrate course content knowledge with clinical practice applications to optimize medication therapy management.

COMMUNICATION SKILLS

Students must be able to communicate effectively with colleagues, professors, patients, families, and healthcare providers. This includes efficiently comprehending, speaking, reading, and writing in English. Students must be able to process and use appropriate nonverbal cues and be proficient in the use of electronic communication media.

BEHAVIORAL AND SOCIAL ATTRIBUTES

Students must demonstrate professionalism, maturity, integrity, honesty, compassion, and respect when relating to others. Students must have sufficient mental and emotional health to complete work and responsibilities using good judgment. Students must be able to tolerate and adapt to stressful workloads and situations and modify behavior based on constructive criticism. Students must be able to function in accordance with the legal, ethical, and professional standards of practice.

OBSERVATION AND MOTOR SKILLS

Students must have functional use of visual, auditory, and tactile senses. Students must be able to observe and perform experiments, physical assessments, patient interviews, and medication order processing. Students must be able to distinguish physical characteristics of medications by inspection. Students must have coordination of gross and fine muscular movements sufficient to perform pharmacy-related tasks including compounding and dispensing medications, administering medications, and using computers and other technology necessary for learning and professional practice.

Academic Dismissal from Major

PharmD students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Failure to earn a grade of C or better in three professional courses, regardless of remediation. Within the PharmD program, each specific professional course (with separate registration number) will be counted as a separate failure even if content is related.
- Failure to earn the minimum required grade in the same course twice.
- Failure to maintain a GPA of 3.000 after two semesters of probation.
- The expected graduation date may not change more than twice.

The PharmD program monitors and promotes the development of professional behaviors in its students to ensure appropriate professionalism in the classroom, local and global communities, and clinical settings. Breach of adherence to these standards may result in dismissal from the program.

Academic Appeals

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the (<https://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/appeals-process/>) Northeastern University Appeals Policies and Procedures. (<https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/academic-appeals-policies-procedures/>)

Progression to the 4th Professional Year (P4) of the PharmD Program (<https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/academic-appeals-policies-procedures/>)

Students enrolled in the PharmD program will be awarded a Bachelor of Science in Pharmacy Studies after successful completion of all didactic and laboratory courses in years 1-5 of the pharmacy curriculum. To earn the PharmD degree, students must complete an additional 36 semester hours of APPEs with an overall GPA of 3.000 or higher. The PharmD degree is required to pursue licensure or registration as a pharmacist; graduates with the Bachelor of Science in Pharmacy Studies degree only are not eligible for pharmacist licensure. (<https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/academic-appeals-policies-procedures/>)

Program Student Learning Outcomes (<https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/academic-appeals-policies-procedures/>)

Please visit (<https://catalog.northeastern.edu/undergraduate/academic-policies-procedures/academic-appeals-policies-procedures/>) Bouvé College Learning Outcomes for the specific student learning outcomes for this program. (<https://bouve.northeastern.edu/bchs/about/learning-outcomes/>)

Undergraduate Phase

- Concentrations and course offerings may vary by campus and/or by program modality. Please consult with your advisor or admissions coach for the course availability each term at your campus or within your program modality.
- Certain options within the program may be *required* at certain campuses or for certain program modalities. Please consult with your advisor or admissions coach for requirements at your campus or for your program modality.

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

Universitywide Requirements

All undergraduate students are required to complete the Universitywide Requirements (<https://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/>).

NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (<https://catalog.northeastern.edu/undergraduate/university-academics/nupath/>).

Complete all courses listed below unless otherwise indicated. Also, complete any corequisite labs, recitations, clinicals, or tools courses where specified, and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

Some NUPath requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with an elective.

Students who incur an incomplete grade in a prerequisite course may not progress into the subsequent courses(s). Any exceptions will be determined by protocols established by the program, after consultation with the student's academic advisor.

Code	Title	Hours
Progression Requirement: The student should maintain a preferred overall GPA of 3.000 or higher and a preferred a science prerequisite GPA of 3.000 or higher through the end of semester 5 to progress to semester 6 (professional year 1) of this program.		
YEAR 1		
PHMD 1000	College: An Introduction	1
YEAR 2		
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	4
PHSC 2320	Biochemistry	4
Progression Requirement: The student must maintain an overall GPA of 3.000 throughout semesters 6 through 13 in order to progress to the graduate-level phase of this program.		
YEAR 3		
Co-op/Introductory Pharmacy Practice Experience ¹		
PHMD 5115	Integrated Science and Therapeutics 2	4
PHMD 5120	Principles of Pharmacy Practice	4
PHMD 5140	Integrated Social and Administrative Sciences 1	4
PHMD 5182	Integrated Learning Lab 2	1
PHMD 5191	Concepts in Practice 1	1
PHMD 5192	Concepts in Practice 2	1
PHSC 5110	Integrated Science and Therapeutics 1	4
PHSC 5130	Foundations of Pharmaceutical Sciences 1	4
PHSC 5181	Integrated Learning Lab 1	1
YEAR 4		
Co-op/Introductory Pharmacy Practice Experience ¹		
PHMD 5210	Integrated Science and Therapeutics 4	4
PHMD 5215	Integrated Science and Therapeutics 5	4
PHMD 5220	Integrated Science and Therapeutics 6	4
PHMD 5240	Integrated Social and Administrative Sciences 2	4
PHMD 5245	Integrated Social and Administrative Sciences 3	4

		Pharmacy, PharmD	5
PHMD 5283	Integrated Learning Lab 3		1
PHMD 5284	Integrated Learning Lab 4		1
PHMD 5285	Integrated Learning Lab 5		1
PHMD 5293	Concepts in Practice 3		1
PHMD 5294	Concepts in Practice 4		1
PHMD 5295	Concepts in Practice 5		1
PHSC 5205	Integrated Science and Therapeutics 3		4
PHSC 5230	Foundations of Pharmaceutical Sciences 2		4
YEAR 5			
Co-op/Introductory Pharmacy Practice Experience ¹			
PHMD 5320	APPE Readiness		4
PHMD 5335	Integrated Science and Therapeutics 7		4
PHMD 5345	Integrated Social and Administrative Sciences 4		4
PHMD 5386	Integrated Learning Lab 6		1
PHMD 5396	Concepts in Practice 6		1

¹ For pharmacy students, an unsatisfactory grade (U) in a co-op will be counted as a professional course deficiency.

Electives

Code	Title	Hours
A minimum of 30 semester hours of electives is required.		30

Students must use electives to fulfill the professional elective requirement, the NUpath Interpreting Culture, Understanding Societies and Institutions, and Exploring Creative Expression and Innovation attributes (if not already fulfilled through prior coursework).

Professional Elective

Complete at least 2 semester hours during the professional phase of the program from the following:

CAEP 3480	Counseling Theories and Practice
CAEP 6203	Understanding Culture and Diversity
HINF 5101	Introduction to Health Informatics and Health Information Systems
HINF 5407	Business Application of Decision Support in Healthcare
HINF 6205	Creation and Application of Medical Knowledge
HINF 6404	Patient Engagement Informatics and Analytics
HLTH 2100	Interprofessional Ethics for Individual and Population Health
HLTH 2302	Alternative Medicine
HLTH 5002	Mindfulness: Theory and Practice
HLTH 5280	The (in)Visibility of (dis)Ability in Society
HSCI 1105	Human Nutrition
HSCI 2350	Advanced Nutrition in Health and Disease
HSCI 2500	Public Health Nutrition in the Community
NRSG 1205	Wellness
PHMD 3600	Leadership and Advocacy in Health Professions
PHMD 4350	Exploring Academic Careers
PHMD 4581	Cancer Chemotherapy
PHMD 4585	Research Methods in Health Systems
PHMD 4700	Principles in General Medicine
PHMD 4890	Contemporary Issues in Geriatric Pharmacy
PHMD 5575	Pharmaceutical Industry
PHMD 5675	Ambulatory Care Pharmacy Practice in Urban Health
PHMD 5900	Self-Care and Nonprescription Medications: A Team-Based Approach
PHMD 5976	Directed Study
PHMD 5984	Research
PHSC 5100	Concepts in Pharmaceutical Science
PHSC 5400	Principles of Drug Design
PHSC 5500	Repurposing Drugs for Cancer Immunotherapies

PHSC 5555	Pharmaceutical Toxicology
PHSC 5976	Directed Study
PHSC 5984	Research
PHSC 6222	The Chemistry and Biology of Drugs of Abuse
PHSC 6224	Behavioral Pharmacology and Drug Discovery
PHSC 6290	Biophysical Methods in Drug Discovery
PHTH 1270	Introduction to Global Health
PHTH 5222	Health Advocacy
PHTH 5226	Strategic Management and Leadership in Healthcare
PHTH 5230	Global Health
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy
PHTH 5300	Project Management in Public Health
PHTH 5310	Budget Principles in Public Health
PHTH 5320	Grant Writing in Public Health
PHTH 6320	Qualitative Methods in Health and Illness
PMST 6250	Advanced Physical Pharmacy
PMST 6252	Pharmacokinetics and Drug Metabolism
PMST 6254	Advanced Drug Delivery Systems
SLPA 1101	Bridging Minds: Introduction to Speech, Language, and Hearing Sciences
SLPA 1555	Communication Disorders in Movies

Supporting Courses

Code	Title	Hours
YEAR 1		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
ENGW 1111	First-Year Writing	4
<i>The university requires a minimum grade of C for First-Year Writing (ENGW 1111). The university's minimum passing grade for the course will be accepted for all other courses.</i>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
MATH 1245	Calculus with Applications	4
YEAR 2		
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
ENGW 3306	Advanced Writing in the Health Professions	4
<i>The university requires a minimum grade of C for Advanced Writing in the Health Professions (ENGW 3306). The university's minimum passing grade for the course will be accepted for all other courses.</i>		

Program Requirement

If the Bachelor of Science in Pharmacy Studies degree is the terminal degree (i.e., the student does not plan to continue on to the fourth professional year), an overall grade-point average of 2.000 or greater is considered acceptable. Students who earn the Bachelor of Science in Pharmacy Studies as the terminal degree are not eligible for pharmacist licensure.

A minimum grade of C is required in major prerequisite courses (those identified with the subject code: BIOL, CHEM, MATH). To progress into the subsequent year of professional courses, students must have completed all professional prerequisites with the required minimum passing grade, have satisfactorily completed all academic courses in the preprofessional phase of the curriculum, have an overall preferred GPA of 3.000 or higher, and a science prerequisite preferred GPA of 3.000 or higher. The science GPA is comprised of all courses with prefix BIOL, CHEM, MATH. In addition, to progress into the first professional year of the PharmD program (P1), students must demonstrate good verbal and written communication skills,

understanding of the pharmacy profession, and commitment to patient care through an interview process based on criteria set by the School of Pharmacy and Pharmaceutical Sciences.

To progress into the subsequent semester of professional courses, students must receive a grade of C or better in all PHMD and PHSC courses, as well as in any course completed to fulfill the professional elective requirement.

All students entering P1 in fall 2022 and beyond are required to complete the PharmCAS application. The PharmCAS application process is considered a formality in the progression process and will not jeopardize the student's preferred or guaranteed enrollment status.

152 total semester hours required

Graduate Phase

- Concentrations and course offerings may vary by campus and/or by program modality. Please consult with your advisor or admissions coach for the course availability each term at your campus or within your program modality.
- Certain options within the program may be *required* at certain campuses or for certain program modalities. Please consult with your advisor or admissions coach for requirements at your campus or for your program modality.

Complete all courses and requirements listed below unless otherwise indicated.

Core Requirements

Code	Title	Hours
Complete 36 semester hours in the following range:		36
PHMD 6440 to PHMD 6474		

Program Credit/GPA Requirements

36 total semester hours required

Minimum 3.000 GPA required

Plan of Study

Sample Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Preprofessional studies (PP1)		Preprofessional studies (PP1)		Preprofessional studies (PP1)		Preprofessional studies (PP1)	
BIOL 1111 and BIOL 1112	5	BIOL 1113 and BIOL 1114	5	Vacation/GEO		Vacation/GEO	
CHEM 1161 and CHEM 1162 and CHEM 1163	5	CHEM 2311 and CHEM 2312 and CHEM 2319	5				
ENGW 1111	4	MATH 1241	4				
PHMD 1000	1	Elective/NUPath Elective	4				
Elective/NUPath Elective	4						
	19		18		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Preprofessional studies (PP2)		Preprofessional studies (PP2)		Preprofessional studies (PP2)		Preprofessional studies (PP2)	
CHEM 2313 and CHEM 2314 and CHEM 2320	5	ENGW 3306	4	Vacation/GEO		Vacation/GEO	
PHSC 2301 and PHSC 2302	4	PHSC 2303 and PHSC 2304	4				
Elective/NUPath Elective	4	PHSC 2320	4				
Elective/NUPath Elective	4	Elective/NUPath Elective	4				
	17		16		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Professional year 1 (P1)		Professional year 1 (P1)		Professional Year 1 (P1)		PHMD 5115	4
PHSC 5110		4 Introductory Pharmacy Practice Experience (IPPE) / Co-op		0 Introductory Pharmacy Practice Experience (IPPE) / Co-op		0 PHMD 5182	1
PHMD 5120	4					PHMD 5192	1
PHMD 5140	4					Elective/NUPath Elective	2-4
PHMD 5191	1						
PHSC 5130	4						
PHSC 5181	1						
	18			0		0	8-10
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Professional year 2 (P2)		Professional year 2 (P2)		Professional Year 2 (P2)		Introductory Pharmacy Practice Experience (IPPE) / Co-op	0
PHMD 5240	4	PHMD 5210	4	PHMD 5220	4		
PHMD 5283	1	PHMD 5215	4	PHMD 5285	1		
PHMD 5293	1	PHMD 5245	4	PHMD 5295	1		
PHSC 5205	4	PHMD 5284	1	Elective/NUPath Elective	2-4		
PHSC 5230	4	PHMD 5294	1				
Elective/NUPath Elective	2-4	Elective/NUPath Elective	2-4				
	16-18		16-18		8-10		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Professional year 3 (P3)		Professional year 3 (P3)		Professional Year 4 (P4)		Professional Year 4 (P4)	
Introductory Pharmacy Practice Experience (IPPE) / Co-op	0	PHMD 5320	4	APPE (choose from PHMD 6440–PHMD 6474)	6	APPE (choose from PHMD 6440–PHMD 6474)	6
		PHMD 5335	4				
		PHMD 5345	4				
		PHMD 5386	1				
		PHMD 5396	1				
		Elective/NUPath Elective	2-4				
	0		16-18		6		6
Year 6							
Fall	Hours	Spring	Hours				
Professional year 4 (P4)		Professional year 4 (P4)					
APPE (choose from PHMD 6440–PHMD 6474)	6	APPE (choose from PHMD 6440–PHMD 6474)	6				
APPE (choose from PHMD 6440–PHMD 6474)	6	APPE (choose from PHMD 6440–PHMD 6474)	6				
	12		12				

Total Hours: 188-198