

# Pharmacy Technology

## Pharmacy Technology Suggested Course Sequence

The following is the suggested plan for when to take each course to complete the Associate in Applied Science degree, based on the program requirements of the 2023-2024 catalog. This is only a recommendation — you may take courses in another order upon consultation with your advisor. This plan is based on you starting with college-level math and English courses, starting your program in the fall, and attending full-time. You can also follow this sequence if you attend part-time. Speak with your academic advisor about the plan and any questions. This program might also offer diplomas or certificates; visit the catalog or contact the program for details. Visit the Academic Advising page for instructions on locating your assigned advisor: <https://www.cpcc.edu/academics/academic-advising>

Term I		Credits
PHM 110	Introduction to Pharmacy	3.0
PHM 111	Pharmacy Practice I	4.0
MAT 143	Quantitative Literacy	3.0
PHM 115	Pharmacy Calculations	3.0
PHM 120	Pharmacology I	3.0
ACA 122	College Transfer Success	1.0
<b>Credits</b>		<b>17</b>
Term II		
PHM 155	Community Pharmacy	3.0
PHM 125	Pharmacology II	3.0
PHM 140	Trends in Pharmacy	2.0
PHM 134	Pharmacy Clinical	4.0
PHM 165	Pharmacy Prof Practice	2.0
BIO 161	Introduction to Human Biology	3.0
or BIO 110	or Principles of Biology	
or BIO 111	or General Biology I	
or BIO 112	or General Biology II	
or BIO 163	or Basic Anatomy & Physiology	
or BIO 168	or Anatomy and Physiology I	
<b>Credits</b>		<b>17</b>
Term III		
PSY 150	General Psychology	3.0
ENG 111	Writing and Inquiry	3.0
MED 121	Medical Terminology I	3.0
<b>Credits</b>		<b>9</b>
Term IV		
PHM 160	Pharm Dosage Forms	3.0
PHM 150	Hospital Pharmacy	4.0
PHM 118	Sterile Products	4.0
ENG 112	Writing and Research in the Disciplines	3.0
or COM 110	or Introduction to Communication	
or COM 231	or Public Speaking	
PHM 132	Pharmacy Clinical	2.0
<b>Credits</b>		<b>16</b>
Term V		
PHM 133	Pharmacy Clinical	3.0
PHM 265	Professional Issues	3.0
Humanities/Fine Arts		3.0
<b>Credits</b>		<b>9</b>
<b>Total Credits</b>		<b>68</b>

**PHM 110. Introduction to Pharmacy. 3.0 Credits.** Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces pharmacy practice and the technician's role in a variety of pharmacy settings. Topics include medical terminology and abbreviations, drug delivery systems, law and ethics, prescription and medication orders, and the health care system. Upon completion, students should be able to explain the role of pharmacy technicians, read and interpret drug orders, describe quality assurance, and utilize pharmacy references.

**PHM 111. Pharmacy Practice I. 4.0 Credits.** Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course provides instruction in the technical procedures for preparing and dispensing drugs in the hospital and retail settings under supervision of a registered pharmacist. Topics include drug packaging and labeling, out-patient dispensing, hospital dispensing procedures, controlled substance procedures, inventory control, and non-sterile compounding. Upon completion, students should be able to perform basic supervised dispensing techniques in a variety of pharmacy settings.

Corequisites: Take PHM 110 and PHM 115

**PHM 115. Pharmacy Calculations. 3.0 Credits.** Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides an introduction to the metric, avoidupois, and apothecary systems of measurement and the calculations used in pharmacy practice. Topics include ratio and proportion, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution and concentration, aliquots, specific gravity and density, and flow rates. Upon completion, students should be able to correctly perform calculations required to properly prepare a medication order.

**PHM 118. Sterile Products. 4.0 Credits.** Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course provides an introduction to intravenous admixture preparation and other sterile products, including total parenteral nutrition and chemotherapy. Topics include aseptic techniques; facilities, equipment, and supplies utilized in admixture preparation; incompatibility and stability; laminar flow hoods; immunizations and irrigation solutions; and quality assurance. Upon completion, students should be able to describe and demonstrate the steps involved in preparation of intermittent and continuous infusions, total parenteral nutrition, and chemotherapy.

Prerequisites: Take PHM 110 PHM 111, minimum grade of C

**PHM 120. Pharmacology I. 3.0 Credits.** Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course introduces the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include nutritional products, blood modifiers, hormones, diuretics, cardiovascular agents, respiratory drugs, and gastrointestinal agents. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

**PHM 125. Pharmacology II. 3.0 Credits.** Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides a continuation of the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include autonomic and central nervous system agents, anti-inflammatory agents, and anti-infective drugs. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

Prerequisites: Take PHM 120, minimum grade of C

**PHM 132. Pharmacy Clinical. 2.0 Credits.** Class-0.0. Clinical-6.0. Lab-0.0. Work-0.0

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers. Prerequisites: Take PHM 111, minimum grade of C

**PHM 133. Pharmacy Clinical. 3.0 Credits.** Class-0.0. Clinical-9.0. Lab-0.0. Work-0.0

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

**PHM 134. Pharmacy Clinical. 4.0 Credits.** Class-0.0. Clinical-12.0. Lab-0.0. Work-0.0

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

**PHM 135. Pharmacy Clinical. 5.0 Credits.** Class-0.0. Clinical-15.0. Lab-0.0. Work-0.0

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

**PHM 136. Pharmacy Clinical. 6.0 Credits.** Class-0.0. Clinical-18.0. Lab-0.0. Work-0.0

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

**PHM 138. Pharmacy Clinical. 8.0 Credits.** Class-0.0. Clinical-24.0. Lab-0.0. Work-0.0

This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

**PHM 140. Trends in Pharmacy. 2.0 Credits.** Class-2.0. Clinical-0.0. Lab-0.0. Work-0.0

This course covers the major issues, trends, and concepts in contemporary pharmacy practice. Topics include professional ethics, continuing education, job placement, and the latest developments in pharmacy technician practice. Upon completion, students should be able to demonstrate a basic knowledge of the topics discussed. Prerequisites: Take PHM 110, minimum grade of C

**PHM 150. Hospital Pharmacy. 4.0 Credits.** Class-3.0. Clinical-0.0. Lab-3.0. Work-0.0

This course provides an in-depth study of hospital pharmacy practice. Topics include hospital organizational structure, committee functions, utilization of reference works, purchasing and inventory control, drug delivery systems, and intravenous admixture preparation. Upon completion, students should be able to explain hospital organization/committee functions, interpret and enter patient orders, fill unit-dose cassettes, and prepare intravenous admixtures.

**PHM 155. Community Pharmacy. 3.0 Credits.** Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0

This course covers the operational procedures relating to retail pharmacy. Emphasis is placed on a general knowledge of over-the-counter products, prescription processing, business/inventory management, and specialty patient services. Upon completion, students should be able to provide technical assistance and support to the retail pharmacist.

**PHM 160. Pharm Dosage Forms. 3.0 Credits.** Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course is a study of pharmaceutical dosage forms and considerations in their manufacture. Topics include bioavailability, routes of administration, tablets, capsules, solutions, syrups, suspensions, elixirs, aerosols, transdermals, topicals, ophthalmics, otics, and other dosage forms. Upon completion, students should be able to describe the characteristics of the major dosage forms and explain how these characteristics affect the action of the drug.

**PHM 165. Pharmacy Prof Practice. 2.0 Credits.** Class-2.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides a general overview of all aspects of pharmacy technician practice. Emphasis is placed on pharmacy law, calculations, compounding, pharmacology, and pharmacy operations. Upon completion, students should be able to demonstrate competence in the areas required for the Pharmacy Technician Certification Examination.

**PHM 265. Professional Issues. 3.0 Credits.** Class-3.0. Clinical-0.0. Lab-0.0. Work-0.0

This course provides a comprehensive discussion of topics common to the practice of the pharmacy technician. Emphasis is placed on application of professional competencies including legal/ethical issues, leadership/management concepts and employability skills. Upon completion, students should be able to demonstrate competence in pharmacy workplace skills and leadership/management roles.

Prerequisites: Take PHM 165, minimum grade of C