

Pharmacy Technician: Program Outline

Program Goal and Outcomes

To prepare students to take the Pharmacy Technician Certification Exam (PTCE) or NHA ExCPT exam, and gain entry-level employment as a pharmacy technician.

PTCE Knowledge Domains and Areas	Program Outcomes	Courses	Evidence of Learning
1. Medications (40%)	Demonstrate knowledge and skills in areas of science relevant to the pharmacy technician's role, including anatomy, physiology, and pharmacology	PHT103: Pharmacology, Drug Class, and Body Systems, Part 1	Unit quizzes
		PHT104: Pharmacology, Drug Class, and Body Systems, Part 2	Unit quizzes
		PHT107: Pharmacy Sterile and Nonsterile Compounding	Unit quizzes
		PHT200: Pharmacy Management and Operations	Unit quizzes
		PHT202: Pharmacy Management Software	Unit quizzes
2. Federal Requirements (12.5%)	Compare and contrast the roles of pharmacists and pharmacy technicians in ensuring pharmacy department compliance with professional standards and relevant legal, regulatory, formulary, contractual, and safety requirements.	PHT101: Pharmacy Technician Orientation	Unit quizzes
		PHT105: Pharmacy Practice Law and Regulations	Unit quizzes
		PHT107: Pharmacy Sterile and Nonsterile Compounding	Unit quizzes
		PHT200: Pharmacy Management and Operations	Unit quizzes
		PHT202: Pharmacy Management Software	Unit quizzes
		PHT301: Pharmacy Technician Certification Review	Unit quizzes

PTCE Knowledge Domains and Areas	Program Outcomes	Courses	Evidence of Learning
3. Patient Safety and Quality Assurance (26.25%)	Describe the steps, skills, and knowledge needed to prepare medications requiring compounding of sterile products, chemotherapy/hazardous products, and nonsterile products	PHT103: Pharmacology, Drug Class, and Body Systems, Part 1	Unit quizzes
	Explain patient- and medication-safety practices in all aspects of the pharmacy technician's roles	PHT104: Pharmacology, Drug Class, and Body Systems, Part 2	Unit quizzes
	Demonstrate knowledge of quality assurance practices for pharmaceuticals, durable and nondurable medical equipment, devices, and supplies	PHT107: Pharmacy Sterile and Nonsterile Compounding	Unit quizzes
	Describe the use of current technology in the healthcare environment to ensure the safety and accuracy of medication dispensing	PHT200: Pharmacy Management and Operations	Unit quizzes
	PHT201: Pharmacy Billing and Reimbursement	Unit quizzes	
4. Order Entry and Processing (21.25%)	Demonstrate knowledge of accepted procedures in purchasing pharmaceuticals, devices, and supplies	PHT106: Math Calculations for Pharmacy Technicians	Unit quizzes
	Apply the steps in the medication order entry and fill process and interpret medication orders	PHT107: Pharmacy Sterile and Nonsterile Compounding	Unit quizzes
	Describe the steps, skills, and knowledge needed to prepare medications requiring compounding of sterile products, chemotherapy/hazardous products, and nonsterile products	PHT200: Pharmacy Management and Operations	Unit quizzes
	Describe the steps needed to initiate, verify, and assist in the adjudication of billing for	PHT201: Pharmacy Billing and Reimbursement	Unit quizzes
	PHT202: Pharmacy Management Software	Unit quizzes	

PTCE Knowledge Domains and Areas	Program Outcomes	Courses	Evidence of Learning
N/A	pharmacy services and goods, and collecting payment for these services	PHT101: Pharmacy Technician Orientation	Unit quizzes
N/A	Explain the skills and strategies needed for professional and appropriate personal behavior and interpersonal communication	CRB100: Career Readiness	Unit quizzes
N/A	Explain the skills and strategies needed for professional and appropriate personal behavior and interpersonal communication	PHT105: Pharmacy Practice Law and Regulations	Unit quizzes Unit quizzes
N/A	Explain the skills and strategies needed for professional and appropriate personal behavior and interpersonal communication	PHT202: Pharmacy Management Software	Unit quizzes

Program Structure

Starting Your Program

Lesson 1 Starting Your Program

PHT101: Pharmacy Technician Orientation

Lesson 2 Introduction to Pharmacy Technician

CRB100: Career Readiness

Lesson 3 Personal Skills

Lesson 4 People Skills

Lesson 5 Workspace Skills

PHT103: Pharmacology, Drug Class, and Body Systems, Part 1

Lesson 6 Basics of Pharmacology

Lesson 7 Cardiovascular Systems

Lesson 8 Respiratory and Endocrine Systems

Lesson 9 Gastrointestinal, Urinary, and Reproductive Systems

PHT104: Pharmacology, Drug Class, and Body Systems, Part 2

Lesson 10 Integumentary and Musculoskeletal Systems

Lesson 11 Sensory Organs and Nervous System

Lesson 12 Immune System, HIV, and Cancer

Lesson 13 Antibiotics, Antifungals, Antivirals, and Dietary Supplements

PHT105: Pharmacy Practice Law and Regulations

Lesson 14 Law for the Pharmacy Technician

Lesson 15 Ethics for the Pharmacy Technician

Lesson 16 Confidentiality for the Pharmacy Technician

PHT106: Math Calculations for Pharmacy Technicians

Lesson 17 Basic Math Skills, Measurements, and Measurement Conversion

Lesson 18 Medication and Prescription Orders and Their Calculations

Lesson 19 Special Medication Calculations and Business Math

Digital Textbook *Math Calculations for Pharmacy Technicians*

PHT107: Pharmacy Sterile and Nonsterile Compounding

Lesson 20 Sterile Compounding Essentials

Lesson 21 Sterile Compounding Procedures

Lesson 22 Hazardous and Nonsterile Compounding and Pharmacy Management

Digital Textbook	<i>Mosby's Sterile Compounding for Pharmacy Technicians</i>
Digital Textbook	<i>Mosby's Pharmacy Technician: Principles and Practice</i>
PHT200: Pharmacy Management and Operations	
Lesson 23	Drug Information References
Lesson 24	Community, Institutional, and Additional Practice Settings
Lesson 25	Medication Safety and Error Prevention
PHT201: Pharmacy Billing and Reimbursement	
Lesson 26	Reimbursement Methodologies for Pharmacy Technicians
Lesson 27	Pharmacy Billing and Inventory Management
PHT202: Pharmacy Management Software	
Lesson 28	Prescription Processing
Lesson 29	Community Pharmacy Practice
PHT301: Pharmacy Technician Certification Review	
Lesson 30	Pharmacy Technician Workbook & Certification Review
Digital Textbook	<i>The Pharmacy Technician Workbook & Certification Review</i>

Course Descriptions and Objectives

SYP110: Starting Your Program

In this course, you'll develop the necessary skills to ensure your success in the program. You'll learn how you can improve your study skills, so you're able to use a number of tools that will help you to be successful.

By the end of this course, you'll be able to do the following:

- Identify skills needed to be a confident and independent online learner

PHT101: Pharmacy Technician Orientation

In this course, students will be introduced to the practice of pharmacy, including the history of pharmacy, technician roles in various practice settings, and pharmacy ethics and professionalism. In addition, students will learn about advancing and emerging opportunities for technicians now and in the future.

By the end of this course, you'll be able to do the following:

- Examine the role and responsibilities of the pharmacy technician profession over time

CRB100: Career Readiness

In this course, you'll learn the personal qualities that employers look for in their employees, such as integrity and dependability. You'll review the baseline responsibilities common to most jobs and the importance of employee handbooks in a successful work environment. Strategies required to be productive and adapt to change are also covered. You'll examine the interpersonal skills needed to ensure positive interactions with diverse populations through various channels of communication and gain strategies for overcoming communication barriers. An understanding of the importance of teamwork, different roles of team members, characteristics of leadership, and strategies for overcoming conflict employed by successful teams are critical elements of interpersonal interactions.

You'll gain an understanding of critical workplace skills. These include time management, prioritization, the decision-making process, the problem-solving process, and open-mindedness, as well as learning how to interact with customers in a professional manner.

By the end of this course, you'll be able to do the following:

- Define the personal qualities of integrity, dependability, and professionalism that are essential to effective work environments
- Explain the interpersonal skills, including respect, communication, and teamwork, that are needed to succeed in a work environment
- Describe workplace skills, tools, and technology that are necessary for working in a professional environment

PHT103: Pharmacology, Drug Class, and Body Systems, Part 1

This course will familiarize you with various body systems including structures, functions, diseases, disorders, and treatments. You'll also learn drug delivery systems, drug administration routes, drug classifications, and commonly used medications for various organ system disorders.

By the end of this course, you'll be able to do the following:

- Summarize the basic principles of pharmacology
- Identify the anatomy, physiology, diseases, and treatments of the cardiovascular and hematologic systems
- Identify the anatomy, physiology, diseases, and treatments of the respiratory and endocrine systems
- Identify the anatomy, physiology, diseases and treatments of the gastrointestinal, urinary, and reproductive systems

PHT104: Pharmacology, Drug Class, and Body Systems, Part 2

This course is a continuation of Pharmacology, Drug Class, and Body Systems, Part 1. You'll continue to learn about various body systems, drug delivery systems, drug administration routes, drug classifications, and commonly used medications for various organ system disorders. You'll also learn about specific classes of antibiotics, antifungals, antivirals, and dietary supplements for preventive health. Medications are listed throughout this unit by their generic names, with brand names provided in parentheses.

By the end of this course, you'll be able to do the following:

- Identify the anatomy, physiology, and diseases and treatments of the integumentary and musculoskeletal systems
- Identify the anatomy, physiology, and diseases and treatments of the sensory and nervous systems
- Identify the anatomy, physiology, and diseases and treatments of the immune system
- Identify the benefits and mechanisms of action of different types of medications and dietary supplements in preventing and treating disease

PHT105: Pharmacy Practice Law and Regulations

In this course, you'll learn how law affects healthcare practitioners, the origin of laws that affects medical professionals, and how to mitigate risk regarding malpractice, crimes, and torts. You'll also learn about the legal basis for the confidentiality of healthcare information, and the laws regulating healthcare information collected and maintained by government agencies.

By the end of this course, you'll be able to do the following:

- Interpret civil and criminal laws related to pharmacy practice
- Assess ethical issues healthcare professionals face today
- Apply confidentiality laws and regulations

PHT106: Math Calculations for Pharmacy Technicians

This course introduces the pharmacy technician student to basic math, algebra, and pharmaceutical calculations used in pharmacy practice..

By the end of this course, you'll be able to do the following:

- Demonstrate basic math aptitude needed for pharmacy technician practice
- Perform calculations related to prescription orders
- Perform special medical calculations and business math used in the pharmacy

PHT107: Pharmacy Sterile and Nonsterile Compounding

This course introduces students to sterile and nonsterile compounding. A strong emphasis is placed on proper aseptic technique and compliance with USP 797 and 800. Compounding practices and equipment are also discussed.

By the end of this course, you'll be able to do the following:

- Define sterile compounding, requirements and processes for IV medications, and the pharmacy technician's role
- Explain best practices for sterile compounding following USP guidelines
- Explain best practices for compounding, including hazardous drugs following USP guidelines, quality management, and safety

PHT200: Pharmacy Management and Operations

This course introduces the pharmacy technician student to pharmacy operations. Students will discuss the differences between pharmacy settings, examine the business applications of pharmacy, and review drug information resources, including how and when to use them. Students will also learn how to handle medication safely, and the steps involved in error prevention.

By the end of this course, you'll be able to do the following:

- Examine drug information references and their proper use
- Differentiate the responsibilities of pharmacy technicians in various pharmacy settings
- Describe the importance of reporting medication errors and the preventive measures taken to reduce them

PHT201: Pharmacy Billing and Reimbursement

In this course, you'll learn about the pharmacy reimbursement process. You'll study third party healthcare plans, reimbursement systems, and claims processing to see how medical services are billed in healthcare institutions. You'll also learn about various health insurance programs, how they're funded, and which types of patients they cover.

By the end of this course, you'll be able to do the following:

- Explain reimbursement methodologies related to pharmacy practice settings
- Explain the elements of pharmacy billing and proper inventory management

PHT202: Pharmacy Management Software

This course is designed to facilitate your mastery of computer and practical skills needed to perform various pharmacy technician-related responsibilities in community pharmacy practices. The course entails a series of lab activities that walk you through entering and filling prescription orders.

By the end of this course, you'll be able to do the following:

- Use database software and pharmacy materials for simulated prescription processing
- Model community pharmacy tasks and database processing for medical equipment, basic compounding, and IV orders

PHT301: Pharmacy Technician Certification Review

This course is designed to strengthen your working knowledge of the concepts essential for pharmacy technician practice and serves as a review to prepare you to take the Pharmacy Technician Certification Exam.

By the end of this course, you'll be able to do the following:

- Demonstrate preparedness for the Pharmacy Technician Certification Exam

Note: The titles of your learning materials may be different from those listed on your program outline. There is no need to call your instructor about these differences. While the titles of certain learning materials may differ, the educational content is the same. All learning materials are designed to give you the finest education in your field. If you need instructional assistance, however, be sure to call for help. We reserve the right to revise the program of study and the instructional materials and to substitute for the items of equipment offered.