

# Pharmacy Technician

## LEARNING OBJECTIVES



This isn't your standard, run-of-the-mill pharm tech program. It's designed to meet all Objectives of the Accreditation Standards for Pharmacy Technician Education and Training Programs, and includes unparalleled content, career support, and a clinical externship opportunity. Each course explores terminology, calculation techniques, record keeping, and pharmaceutical ethics—while immersive virtual activities provide hands-on practice. Don't worry, though. We'll start with the basics before diving deep into all the advanced skills you'll need to be successful.

We'll also provide a free certification exam voucher to take the Pharmacy Technician Certification Board (PTCB) Certified Pharmacy Technician exam (CPhT)—the most recognized and respected national certification in the industry.

### Program Orientation

- Initiate the Pharmacy Technician Program.

### Pharmacy Business

- Describe proper customer service procedures related to professional communication, appearance, duties, and limits.
- Describe and differentiate between prescription insurance plans, including Medicaid, Medicare Part D, and Workers' Compensation.
- Explore proper procedures for filing claims and accepting payment.
- Identify processes and proper measures for productivity tracking and benchmarking, pharmacy security, and emergency preparedness.

### Pharmacy Law

- Explain the various types of law.
- Identify violations of the law related to the field of pharmacy.
- Differentiate between state and federal pharmacy laws.
- Explain the Controlled Substances Act and Schedule drugs.
- Discuss the Drug Listing Act of 1972.
- List various DEA forms used for controlled substances.
- Review the Orphan Drug Act of 1983.
- Explain the Occupational Safety and Health Administration (OSHA).
- State the regulations of the Health Insurance Portability and Accountability Act (HIPAA).
- Explain the roles of pharmacy technicians in working with controlled substances.
- Identify which primary drug information resource does not include all available drugs, and why.
- Explain why the loose-leaf version of "Drug Facts and Comparisons" is extremely popular in pharmacies.

- Identify the best source to use to determine whether a generic drug is equivalent to a brand name drug.
- Explore the reference that accesses all FDA official standards and lists new products being developed and approved.
- Identify the reference source preferred by hospital pharmacies.
- Explain the reference source that focuses on pharmacogenomics, drug transporting, pharmacokinetics, and pharmacodynamics.
- Identify the reference source that discusses medical foods, non drug and preventive measures for self-treatable disorders, nonprescription medications, and nutritional supplements.
- Explore the databases that have been incorporated into many online drug resources, such as Clinical Pharmacology and Micromedex.
- Identify three online sources of drug information provided by the U.S. government.
- Review the two most popular pharmacy journals.

### Introduction to Human Trafficking

- Identify the warning signs that may indicate someone is a victim of human trafficking.
- State some of the questions that can be asked of identified victims.
- List three resources that can be utilized if a trafficking victim is identified.
- State at least two warning signs that may indicate a person is being trafficked.
- Explain some of the questions that can be asked of identified victims.

### Computer Fundamentals

- Prepare to be consumers and technology users in academic, professional, and personal settings.
- Explore the evolution of society's reliance on technology.

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- Develop personal uses for technology to help with productivity, learning, and future growth.
- Review the role of technology in the professional world.
- Examine the role of the web in daily life.
- Explore the components of websites, webpages, and e-commerce.
- Learn how to search the web to find information you can trust.
- Categorize the various types of computer hardware.
- Demonstrate familiarity with input and output devices.
- Choose and maintain computer hardware that will best meet your needs.
- Learn about different types of operating systems and compare options of each type.
- Understand how an operating system works to help your computer or device function.
- Personalize a computer operating system, as well as its software and hardware, to increase productivity.
- Learn how to manage the files and folders you store on your computer or device.
- Review how you can use apps as part of your daily routine.
- Use common features of productivity apps.
- Examine the types of attacks that occur today and how you can protect your computers, other devices, and your personal information.
- Explore how digital media represents the real world on a device such as a display screen or speaker.
- Explore issues of neutrality and safety in a connected world, and how to connect to different types of networks.
- Learn about the key features of connected networks and explore how connections between networks are made.
- Evaluate the many types of digital communication and how they impact your personal and professional life every day.
- Develop an online presence that adheres to standard Internet etiquette guidelines to help ensure your safety and enhance your employability.
- Examine how and why databases are used, and you explore basic concepts related to working with a database management system.

- Identify legal and ethical responsibilities of a digital citizen.
- Analyze the importance of information accuracy, accessibility, digital footprints, and environmental impacts.

### Comprehensive Medical Terminology

- Analyze how medical terms are built using common word parts.
- Properly spell, define, and pronounce medical terms associated with each of the major body systems.
- Identify and define the word parts most frequently associated with the major body systems.
- Interpret common abbreviations used in medical terminology and cautions to remember when using them.

### Pharmacology for Pharmacy

- Distinguish between drugs of different classifications and their corresponding rules and regulations.
- Differentiate between common medication dosage forms.
- Explore different topical, enteral, and parenteral administration routes and their corresponding methods and recommendations.
- Identify common generic and brand name drugs and their basic functions.
- Use resources to find drug definitions, dosages, pronunciations, and other related information.

### Pharmacy Calculations

- Explain the rules of the metric system and the basic units of weight, volume, and length.
- Describe common equivalents in the metric system.
- Discuss the apothecary system.
- Explain the household system.
- Convert metric measures to their equivalents in the other systems.
- Name the metric equivalents that are used in the medical profession.
- Define common prefixes used in the metric system.
- Explain the rules concerning changing grams to milligrams and milliliters to liters.
- Describe the international unit (IU).

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- Explain the use of milliequivalents (mEq) and units in dosage calculations.
- Explain the difference between Arabic numbers and Roman numerals.
- Change an improper fraction to a mixed fraction.
- Define ratios, proportions, and percentages.
- Describe the relationship between decimals and fractions.
- Define “dimensional analysis.”
- Explain standardized units of drug dosages.
- State the purpose of using West’s nomogram.
- List the formulas for Clark’s Rule, Young’s Rule, and Fried’s Rule.
- Explain the formula used to calculate liquid drugs.
- List the most common types of intravenous solutions.
- Calculate appropriate doses based on age, weight, and body surface area.
- Recognize and convert metric system measurements.
- Use knowledge of significant figures to estimate appropriate drug dosages.

### Community Pharmacy

- Explain the important functions of the community pharmacy.
- Discuss the various roles and responsibilities of pharmacy technicians in community pharmacies.
- Explain the importance of understanding behind-the-counter (BTC) medications.
- Identify the advantages of e-prescribing.
- Identify how completed prescriptions are stored and organized prior to being picked up by patients.
- Discuss how schedule II medications should be secured in the community pharmacy.
- List the most important character traits of a good pharmacy technician.
- Describe the role of the pharmacy technician regarding immunizations in the community pharmacy.
- Differentiate between durable and nondurable supplies and equipment.
- Explain strip packaging, as used when a community pharmacy supplies medications for long-term care services.
- Define long-term care.

- Explain long-term care pharmacy organization.
- Describe home health care and the responsibility of the pharmacy.
- Identify common types of medication packaging used in home health care and long-term care facilities.
- Explain total parenteral nutrition (TPN).
- Describe hospice and ambulatory care.
- Explain the differences between home health care and hospice.
- Name the advantages of mail-order pharmacy.
- Explain the importance of health and safety in nuclear pharmacy.
- Describe the roles of the pharmacy technician in home infusion pharmacy.

### Externship Readiness Skills

- Explore CareerStep Community career resources.
- Develop effective time management skills.
- Enhance your creative and critical thinking.
- Integrate critical and creative thinking skills into your life.
- Learn physical and emotional coping techniques to deal with stress.
- Explore essential ingredients of the communication process.
- Acquire methods to maximize verbal, nonverbal, and written communication.
- Relate the importance of professional image to career success.
- Learn strategies to write a powerful resume.
- Identify key elements of successful interviews.
- Relate the importance of good study habits to your personal success.
- Identify traits related to self-motivation and self-esteem.
- Incorporate a positive and professional attitude in dealing with others.
- Understand that failures are important learning tools.

### Prescriptions

- Review prescriptions, their uses, requirements, and components.
- Differentiate between legend and over-the-counter (OTC) drugs.
- List the component parts of a prescription.

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- Discuss how prescriptions are processed, received, and checked.
- Describe the ways prescriptions are numbered, dated, and labeled.
- Explore the differences between generic and trade names.
- Differentiate between a control number and a National Drug Code.
- Evaluate the importance of rechecking of prescriptions.
- Learn requirements for refilling prescriptions.
- Define medication errors.
- Explain the factors causing medication errors and the ways to avoid them.
- Explain why medication errors should be reported.
- Describe dangerous abbreviations.
- Explain the correct use of leading zeros and trailing zeros.
- Discuss the FDA MedWatch program.
- Define negligence and malpractice.
- Compare medication errors between adults and children.
- Identify “high alert” medications.
- Describe risk factors for medication errors in the elderly.

### Inventory Management

- Describe the specific storage requirements for inventory stock.
- Explain inventory management.
- Define the term want book.
- Describe the importance of computerized inventory systems.
- Explain the system that is the most flexible for pharmacy inventory control.
- Explain the duties of pharmacy technicians in inventory control.
- Describe the use of barcoding in the pharmacy.
- Explore waste control in relation to well-managed inventory programs.
- Explain the use of perceptual inventory in the pharmacy.
- Review special purchasing of controlled substances.

### Non Sterile/Sterile Compounding

- Order the Pharmacy Lab Kit
- Explain the use of a Class-A prescription balance and a counterbalance.
- Describe extemporaneous compounding.
- Describe the difference between a solution, a suspension, an elixir, and an emulsion.
- Identify how capsule sizes are classified.
- Define a “Class-A prescription balance.”
- Name the most common and important equipment for extemporaneous compounding.
- Discuss which liquid ingredients are used to mix with powders in the compounding of tablets.
- Identify methods in which graduates are correctly used for compounding.
- Describe the indications of spatulas and pipettes in compounding.
- Explain the terms levigate and meniscus.
- Explain the uses of laminar airflow hoods.
- Explain the control methods used for the compounding of parenteral products.
- Describe TPN products.
- Explain an intravenous piggyback.
- Discuss the preparation of large-volume parenteral (LVP) preparations.
- Define the term intravenous admixture.
- Explain the use of refrigeration for high-risk compounding products.
- Explain the indications of sterile irrigations.
- Solve pediatric parenteral calculations.
- Explore the use of closed reconstitution systems.
- Review examples of a closed-system transfer device (or CSTDs).
- Learn about factors that are considered for the amount of overfill in parenteral solutions.

### Institutional Pharmacy

- Describe various services of the hospital pharmacy.
- Explore medication orders.
- Define the terms “floor stock” and “point-of-entry system.”
- Review the advantages of computerized

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- physician order entry (CPOE) systems.
- Describe the patient prescription system.
- Review the unit-dose drug distribution system and its advantages.
- Describe the use of unit-dose liquids.
- Explore the entering of medication orders into the hospital information system.
- List the duties of pharmacy technicians in the hospital pharmacy.
- Describe the information included in a hospital patient record.
- List the appropriate steps to prepare oral syringes; check and fill the medication cart, floor stock, and crash cart; and fill and record narcotic floor stock and the automated drug storage and dispensing systems (ADSDSs).

### Pharmacy Labs

- Review expectations and procedures for completing the lab activities.
- Review expectations and procedures for using the lab kit.
- Review expectations and procedures for passing off the labs with an instructor through an interactive video conference (IVC).
- Demonstrate step-by-step training with images and videos to model techniques and skills.
- Become familiar with different measuring systems and units.
- Become oriented with a typical pharmacy environment and gain familiarity with common pharmacy tools.
- Familiarize with a variety of common compounding techniques.
- Explore different types of emulsifying agents and methods for making emulsions and explore elixirs including the purpose of elixirs and how they are created.
- Review packaging products in the appropriate type and size of container and about the options for packaging products for the physically impaired, aged, and children.
- Learn about the procedures for generating accurate and complete product labels.
- Evaluate the protocols in recording the preparation, distribution, and storage of investigational drugs.

- Play the role of a pharmacy technician in a simulated interaction.
- Complete and simulate tasks in a retail pharmacy.

### HIPAA In the Workforce

- Describe HIPAA basics.
- Understand the HIPAA Privacy Rule and Security Rules.
- Describe the HITECH Act.
- Explain regulations for business associates.
- Summarize HIPAA documentation and training.
- Review applied HIPAA security for healthcare professionals.

### Pharmacy Technician Final Exam

- Study key vocabulary and information using flashcards.
- Review Pharmacy Technician Program Final Exam Instructions.
- Complete the Pharmacy Technician Program Final Exam.
- Review and Complete the Pharmacy Technician Certification Exam mapped to PTCB certification exam or ExCPT NHA certification exam.

### Initiating Your Externship

- Create your profile in the Learner Placement Portal.
- Review the externship preparation resources.
- Explore CareerStep Community career resources.
- Understand the benefits of an externship.
- Access externship participation eligibility requirements.
- Recognize the externship site placement process and considerations.

### Clinical Externship

- Earn hours and experience that lead directly to certification.

### Program Completion

- Prepare to take the next steps after program completion.

**TOTAL HOURS: 422**

**292 Coursework, Simulations, and Experiential + 130 Clinical Externship**