

**OFFICE OF CONTINUING PROFESSIONAL
DEVELOPMENT PHARMACY TECHNICIAN TRAINING
PROGRAM SYLLABUS**

PROGRAM DESCRIPTION

The University of Tennessee Health Science Center College of Pharmacy is partnering with the Therapeutic Research Center to launch a comprehensive online pharmacy technician training program. This program is to prepare current and aspiring pharmacy technicians with standardized training to succeed in the fast-paced pharmacy practice setting. This program also serves as thorough examination preparation for the Pharmacy Technician Certification Exam.

Program Title Pharmacy Technician Training Program

Availability: Online

Hours: 160.4

Schedule: Self-paced, to be completed in 12 – 24 weeks

PROGRAM DIRECTORS

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PROGRAM MATERIALS

Upon enrollment in the program, the program directors will provide you access to the comprehensive online pharmacy technician training program. You will receive your own username and login to be able to access program materials.

Please navigate to this link upon receipt of credentials to access program materials: <https://ptu.therapeuticresearch.com/login/index.php?tenantid=204>

COMMUNICATIONS

Please e-mail the program directors directly for questions. Expect a response within 48 business hours, but do not expect a reply during weekends or University closing dates.

PROGRAM OBJECTIVES

Upon completion of this program, each learner should be able to:

- Differentiate between duties allowed and not allowed of a pharmacy technician
- Practice within the scope of practice of a pharmacy technician
- Translate medical terminology and sig codes
- Calculate drug dosages, concentrations, quantities, and days' supply
- Prepare prescriptions and medication orders
- Practice billing procedures for medications and supplies
- Follow inventory policies and procedures
- Classify different pharmacologic classes of medications
- Assist the pharmacist in medication therapy management
- Demonstrate medication reconciliation
- Prepare unit-dose orders and products for medication carts
- Demonstrate sterile and non-sterile compounding
- Demonstrate compounding procedures for chemotherapy agents

PROGRAM EXPECTATIONS

The following guidelines are intended to create a comfortable and productive learning environment through the program.

The learner can expect the course directors to:

- To provide prompt access to program materials
- To be accessible during the 12-week program enrollment period
- To answer questions and provide guidance, when possible, during the 12-week program enrollment period

The program directors can expect the learner to:

- To complete courses in the program in 12 weeks.

- To spend an adequate amount of time on the program each week, making an effort to learn and complete quizzes
- To see help when appropriate

ASSESSMENTS

Three attempts are given for each module quiz and final exam. The minimum pass scores are as follows:

- Unit Exams – 80%
- Midterm – 80%
- Final exam – 75%

PHARMACY TECHNICIAN CERTIFICATION EXAM FEE

Learners may be eligible for a voucher, which covers the cost of the exam to sit for their Pharmacy Technician Certification Exam. The only exam eligible for a voucher is the Pharmacy Technician Certification Exam administered by the Pharmacy Technician Certification Board (see: <https://www.ptcb.org>). To be eligible for a voucher, learners must meet the following requirements: passage of all program assessments in the Pharmacy Technician Training Program and completion of the program in 3 consecutive months from the learners start-date (or in the timeframe agreed upon by the learner and course directors). Failure to meet these requirements may render the learner ineligible for an exam voucher.

PROFESSIONAL CONDUCT

Learners are expected to act in a professional manner in all interactions with the program directors, staff, and other learners.

PROGRAM DISHONESTY

Receiving help from another learner or any other person to complete module assessments or any other program work is prohibited. Learners found in violation of this policy may not be eligible for the pharmacy technician certification exam voucher.

PROGRAM FEES

There are no refunds for the Pharmacy Technician Training Program. Please check with the Board of Pharmacy in the state you plan to practice (or are practicing) to determine your eligibility and the requirements to become a pharmacy technician. If you are interested in a payment plan, please email the course directors. The payment plan will consist of 3 installments of \$600, due on the first day of each consecutive month the learner is enrolled in the program. If timely payment is not received, the course directors reserve the right to suspend access to the Pharmacy Technician Training Program.

PROGRAM SCHEDULE

Program location: Online. It is recommended to complete on average 15 hours a week to complete the program in 12 weeks.

Proof of Enrollment

- Didactic – Administrative
- 0.1 Hours
- Documents the student's enrollment in the pharmacy technician training program.

Policy Attestation

- Didactic – Administrative
- 0.1 Hours
- Students must review and attest to their understanding of the program policies and procedures.

PTU Orientation

- Didactic
- 0.1 Hours
- Welcomes new students into the program with an overview of online learning and instructions on how to navigate through Pharmacy Technicians University.

Role of the Pharmacy Technician

- Didactic
- 2 Hours
- This course provides a look into the roles and responsibilities of pharmacy technicians and other pharmacy staff. Learn about the duties of the technician in various pharmacy A look into the roles and responsibilities of pharmacy technicians and other pharmacy staff. Learn about the duties of the technician in various pharmacy settings, along with the requirements necessary to become a technician and to maintain technician status. Also, learn about the many organizations available for pharmacy technicians to join and their mission to advance pharmacy practice.

Pharmaceutical Terminology

- Didactic
- 2.5 Hours
- In completing the course activities, you'll learn common medical terminology used in the pharmacy. Use word parts to determine the meaning of medical terms, body parts, drug names and classes, and diseases and conditions. Translate abbreviations and symbols that are used to write prescriptions. Also, find out which abbreviations and symbols are error prone and should be avoided.

Medication Safety

- Didactic
- 2 Hours
- Learn what a medication error is, how they occur, and how they can be prevented. Understand how to handle and report medication errors appropriately to help keep patients safe and help prevent the same error from happening again. Also, learn about safety data sheets, which meds require them, and how they help maintain safety in the pharmacy.

Medication Safety Supporting Materials

- Didactic - Supporting
- 1 Hours
- A detailed look into medication safety by understanding points of care that can lead to medication errors. Review techniques in practice that can prevent medication errors with over-the-counter medications.

Communication

- Didactic
- 1.5 hours
- Develop foundational communication skills, including verbal and non-verbal techniques and active listening. Learn strategies to support effective communication across various formats—face-to-face, telephone, and written. Explore approaches for adapting communication to meet the needs of patients with different communication preferences and challenges, such as those related to age, sensory impairments, language barriers, or health literacy.

Communication Supporting Materials

- Didactic - Supporting
- 1.5 Hours
- A detailed look into the pharmacy's role in team-based care for positive patient outcomes. Also, review practice tips for enhancing soft skills that are vital in the pharmacy.

Communication Supporting Materials Part II

- Didactic - Supporting
- 2.5 Hours
- This course equips professionals with essential skills in communication, leadership, and conflict resolution. Participants will learn to improve health literacy, manage time effectively, and mentor others, while also mastering the SBAR communication framework and conflict resolution techniques. The course emphasizes practical leadership skills for fostering team growth and effective decision-making.

Unit Exam I

- Didactic – Exam
- 0.5 Hours
- The Unit Exam I evaluates your understanding of the key concepts and skills covered throughout the following courses: Role of the Pharmacy Technician, Pharmaceutical Terminology, Medication Safety, and Communication. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

[End of Week 1: 13.8 Hours]

Pharmaceutics I

- Didactic
- 3 Hours
- An in-depth overview of solid, liquid, topical, and eye/ear dosage forms, including their characteristics, appropriate auxiliary labels, and dispensing considerations. Gain practical skills in calculating quantities and days' supply for various formulations, and understand the procedures and precautions involved in reconstituting medications.

Pharmaceutics II

- Didactic
- 3 Hours
- A comprehensive look at respiratory, rectal, vaginal, and parenteral dosage forms, emphasizing their unique administration techniques, advantages, and safety considerations. Gain practical knowledge in calculating quantities and days' supply for inhalers and nebulizers, and understand proper labeling, storage, and dispensing practices for injectable and other non-oral medications.

Pharmaceutics Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- Learn when tablets and capsules can be safely split, crushed, or opened, and understand the risks of modifying certain drug formulations. Also define the role of pharmaceutical dyes, including FDA actions, and potential adverse effects.

Drug Information Resources

- Didactic
- 2 Hours
- A comprehensive review of essential drug information resources and medication package inserts, equipping pharmacy technicians with the knowledge needed to navigate and utilize pharmaceutical references effectively.

Unit Exam II

- Didactic – Exam
- 0.5 Hours
- The Unit Exam II evaluates your understanding of the key concepts and skills covered throughout the following courses: Pharmaceutics I, Pharmaceutics II, and Drug Information Resources. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Laws Affecting Prescription Dispensing

- Didactic
- 2 Hours
- A comprehensive look into the federal laws and regulations that govern medication dispensing. Understand the importance of the laws and regulations governing medication dispensing and how they relate to the pharmacy technician's role. Also, understand the responsibilities of federal regulatory agencies that impact the dispensing of medications.

Law Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- This course provides a comprehensive review of two critical areas in pharmacy practice: preventing accidental medication poisonings in children and protecting pharmacies from scams. This course training emphasizes practical strategies to enhance safety and security in both home and pharmacy settings.

Controlled Substances

- Didactic
- 2.5 Hours
- A comprehensive learning experience about DEA (Drug Enforcement Administration), as well as the laws and regulations that pertain to the classification, prescribing, and dispensing of controlled substances. Understand the requirements for managing controlled substance inventory and recordkeeping, along with exploring the requirements for transfers, proper disposal, and handling diversion.

[End of Week 2: 14 Hours]

State Laws and Regulations

- Didactic
- 1.5 Hours
- Learn the state-specific laws and regulations for the role of the pharmacy technician, duties that can and cannot be performed by a technician, and requirements to become a technician. Understand the difference between federal and state laws as it pertains to prescribing and dispensing meds, as well as controlled substance and recordkeeping requirements.

Drug Regulation and Control

- Didactic
- 2 Hours
- Learn how medications are regulated when going to market and when they are recalled or withdrawn. Walk through the phases of a drug's approval process and the pharmacy tech's role with investigational drugs. Also, understand the elements of brand-name patents and generic meds. Learn what's involved with generic substitution using the Orange Book, along with understanding the differences among pharmaceutical and therapeutic alternatives.

Drug Regulation Supporting Materials

- Didactic – Supporting
- 1 Hour
- This comprehensive course offers a thorough and practical overview of three critical areas in pharmacy practice, which include biosimilars, generic substitution, and investigational drugs. Learn how to effectively switch generic products, proper application of the FDA's Orange and Purple Books, and standard practices for dispensing investigational medications.

Restricted Drug Programs

- Didactic
- 0.5 Hours
- Learn about medications that have special prescribing and/or dispensing requirements, the details of the requirements, including the roles of the prescriber, patient, and pharmacy.

Unit Exam III

- Didactic - Exam
- 0.5 Hours
- The Unit Exam III evaluates your understanding of the key concepts and skills covered throughout the following courses: Laws Affecting Prescription Dispensing, Controlled Substances, Drug Regulation and Control, and Restricted Drug Programs. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Basic Anatomy and Physiology

- Didactic
- 2 Hours
- Learn basic body parts and their function for the circulatory, dermatologic, endocrine, gastrointestinal, hematologic, immune, musculoskeletal, nervous, renal, reproductive, respiratory, ophthalmic, and otic systems.

Introduction to Pharmacology

- Didactic
- 1 Hours
- See how foundational pharmacology concepts equip technicians in the pharmacy to help spot med errors, and create a knowledge base for medications to build upon. Learn about common disease states by body system, how medications work in the body, and how they're eliminated. Also, practice with the top 100 medications used in the community and hospital settings.

Anti-Infectives

- Didactic
- 3.5 Hours
- Learn basic pharmacology of anti-infectives and how they work on diseases/conditions of the immune system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Anti-Infectives Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- In this course, expand upon anti-infective use and considerations for safe dispensing practice.

HIV Training

- Didactic – Supporting
- 1 Hours
- In this course you'll gain an understanding of HIV prevention strategies, pre-exposure (PrEP) and postexposure (PEP) prophylaxis, and HIV/AIDS treatment and management.

[End of Week 3: 13.5 Hours]

Unit Exam IV

- Didactic – Exam
- 0.5 Hours
- The Unit Exam IV evaluates your understanding of the key concepts and skills covered throughout the following courses: Basic Anatomy and Physiology, Introduction to Pharmacology, and Anti-Infectives. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Introductory Calculations

- Didactic
- 2.5 Hours
- See how foundational math concepts prepare technicians for performing pharmacy calculations. Learn the rules for working with roman numerals and their current use in the pharmacy. Also, practice adding, subtracting, multiplying, and dividing with fractions and decimals.

Calculation Methods

- Didactic
- 1 Hours
- In pharmacy practice, there are several different calculation methods that can be used to arrive at the same answer. Explore the three methods we recommend to solve pharmacy calculations through walkthroughs, examples, and knowledge checks. Learn which methods are the best fit for solving particular types of pharmacy calculations.

Measurement Calculations

- Didactic
- 1.5 Hours
- Use conversion factors from multiple measuring systems to convert between units. Practice calculating with prescriptions that need converting in order to accurately prepare the products.

Pharmacy Calculations I

- Didactic
- 2 Hours
- This course provides a comprehensive understanding of essential calculations required in pharmacy practice. It focuses on accurately calculating medication quantities and days' supplies for different dosage forms, ensuring safe and effective dispensing. Through practical exercises and real-world scenarios, students will gain proficiency in calculations essential for pharmacy practice.

Pharmacy Calculations II

- Didactic
- 2 Hours
- Learn how to calculate dosages for pediatric and adult patients. Practice calculating dosages for parenteral meds, and meds dosed in milliequivalents and units.

Unit Exam V

- Didactic – Exam
- 0.5 Hour
- Unit Exam V evaluates your understanding of the key concepts and skills covered throughout the following courses: Introductory Calculations, Measurement Calculations, Pharmacy Calculations I, and Pharmacy Calculations II. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Integumentary Medications

- Didactic
- 1.5 Hours
- Learn basic pharmacology of medications that treat diseases/conditions of the integumentary system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Integumentary Medications Supporting Materials

- Didactic - Supporting
- 0.5 Hours
- A review of therapies used for head lice and poison ivy, plus information on sunscreen.

Ophthalmic/Otic Medications

- Didactic
- 1.5 Hours
- In this course, you'll learn basic pharmacology of medications that treat diseases/conditions of the eyes and ears. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

[End of Week 4: 13.5 Hours]

Ophthalmic/Otic Medications Supporting Materials

- Didactic - Supporting
- 0.5 Hours
- In this course, expand upon eye and ear medication use and considerations for safe dispensing practice.

Musculoskeletal Medications

- Didactic
- 2 Hours
- In this course, you'll learn basic pharmacology of medications used to treat diseases/conditions of the musculoskeletal system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Musculoskeletal Medications Supporting Materials

- Didactic – Supporting
- 1 Hour
- This course covers opioid safety and the management of opioid use disorder, providing essential knowledge to promote safe opioid use and support recovery efforts.

Opioid Rescues

- Didactic
- 0.5 Hours
- Read answers to common questions and myths about naloxone and other meds used for opioid overdose.

Unit Exam VI

- Didactic – Exam
- 0.5 Hours
- The Unit Exam VI evaluates your understanding of the key concepts and skills covered throughout the following courses: Integumentary Medications, Ophthalmic/Otic Medications, and Musculoskeletal Medications. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Prescription Drop-Off and Entry

- Didactic
- 3.5 Hours
- This course provides an in-depth understanding of key processes in pharmacy operations. Learn the steps involved from the receipt of prescriptions through data entry. Complete an interactive exercise in entering prescriptions to reinforce practical skills. The course is designed to enhance accuracy, efficiency, and patient satisfaction in a pharmacy.

Prescription Drop-Off and Entry Supporting Materials

- Didactic – Supporting
- 0.5 Hour
- Find out how to prevent errors with prescription transfers to streamline the transferring process and provide optimal customer service during the transition. Also, learn how to efficiently fill partial prescriptions for patients.

Prescription Drop-Off and Entry Supporting Materials Part II

- Didactic – Supporting
- 1 Hour
- This course provides essential training on managing patient profiles and recognizing drug allergies, which can help identify issues with medication therapy, such as which meds should be avoided, which meds may need to be added, and incorrect doses.

Prescription Preparation Part I

- Didactic
- 3.5 Hours
- Learn how to verify accurate prescription labels, fill prescriptions, and select appropriate auxiliary labels. Plus, understand the ins and outs of hazardous drugs in the pharmacy.

[End of Week 5: 13 Hours]

Prescription Preparation Part II

- Didactic
- 2.5 Hours
- Review various methods for prescription delivery or pick up and provide necessary documentation with the prescription. Use automation and other medication safety techniques, including how to identify high-alert meds and look-alike/sound-alike meds.

Prescription Preparation Supporting Materials

- Didactic – Supporting
- 1 Hour
- Find out how to avoid mishaps when dispensing meds for pediatric patients. Plus, get information on automated dispensing cabinets, and how smart technologies and AI are reshaping medication safety in healthcare.

Billing and Third-Party Processing

- Didactic
- 2.5 Hours
- This course explains various payers, such as Medicaid, Medicare, TRICARE, HMOs, PPOs, and other aids for payment. Learn third-party billing terminology and processes used to bill patients' insurance for prescription medications. Learn to troubleshoot rejections from payers, as well as, how to effectively communicate billing issues with patients. This course also covers a look into durable medical equipment and medical supplies. Learn Medicare's requirements for billing and documenting durable medical equipment and supplies as well as review ways to prevent problems during a Medicare or third-party payer audit.

Unit Exam VII

- Didactic – Exam
- 0.5 Hours
- The Unit Exam VII evaluates your understanding of the key concepts and skills covered throughout the following courses: Prescription Drop-Off and Entry, Prescription Preparation Part I, Prescription Preparation Part II, and Billing and Third-Party Processing. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Midterm Exam

- Didactic – Exam
- 2.5 Hours
- The Midterm Exam is a comprehensive exam used to evaluate your understanding of the key concepts and skills covered throughout the first half of the program. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Nervous System Medications

- Didactic
- 4.5 Hours
- In this course, you'll learn basic pharmacology of medications used to treat diseases/conditions of the nervous system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

[End of Week 6: 13.5 Hours]

Nervous System Medications Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- In this course, expand upon nervous system medication use and considerations for safe dispensing practice.

Urinary Medications

- Didactic
- 1 Hour
- In this course, you'll learn basic pharmacology of medications that treat diseases/conditions of the urinary system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Urinary Medications Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- In this course, expand upon urinary medication use and considerations for safe dispensing practice.

Cardiovascular Medications

- Didactic
- 3 Hours
- Learn basic pharmacology of the medications that treat diseases/conditions of the cardiovascular system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring interactions, precautions, and generic and brand names.

Cardiovascular Medications Supporting Materials

- Didactic - Supporting
- 0.5 Hours
- In this course, expand upon cardiovascular medication use and considerations for safe dispensing practice.

Respiratory Medications

- Didactic
- 2 Hours
- In the following modules, you'll learn basic pharmacology of respiratory medications and how they work on diseases/conditions of the respiratory system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Respiratory Medications Supporting Materials

- Didactic – Supporting
- 1 Hours
- In this course, expand upon respiratory medication use and considerations for safe dispensing practice.

Unit Exam VIII

- Didactic - Exam
- 0.5 Hour
- The Unit Exam VIII evaluates your understanding of the key concepts and skills covered throughout the following courses: Nervous System Medications, Urinary Medications, Cardiovascular Medications, and Respiratory Medications. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Inventory

- Didactic
- 3.5 Hours
- Gain a solid understanding of pharmacy suppliers and how to effectively manage medication purchases. Learn how to organize stock, place and reorder medications, check in shipments, and keep the pharmacy running smoothly. The course also covers techniques for arranging

medications by expiration date, returning unused meds, and applying key calculations to optimize inventory. By the end, you'll be prepared to handle inventory management with confidence.

[End of Week 7: 12.5 Hours]

Inventory Control and Management Supporting Materials

- Didactic – Supporting
- 1 Hour
- This course provides a look into inventory control and how to handle situations, including those with suspicious medications and drug shortages.

Specialty Medications

- Didactic – Supporting
- 1.5 Hours
- This course provides an in-depth look at specialty medications, focusing on their unique role in patient care. The course also covers practical approaches to overcoming access challenges and addresses common concerns in the Specialty Meds FAQs module. This course equips learners with the knowledge to manage specialty medications effectively and support patients in accessing the care they need.

Pharmacy Services

- Didactic
- 1.5 Hours
- Understand the importance of medication therapy management, the roles of the pharmacist and technician, and how it's implemented in the pharmacy. Also, learn about health and wellness programs offered in community pharmacy and how technicians play a part in their success.

Pharmacy Services Supporting Materials

- Didactic - Supporting
- 1 Hour
- A comprehensive review of quality measures, how to master medication lists and histories, the importance of medication adherence, and how to improve the taste of medications.

Health and Wellness Supporting Materials

- Didactic – Supporting
- 1.5 Hours
- Review recommendations for screening and how point-of-care tests can be used to screen for medical conditions and understand the influence of socioeconomic and cultural factors on health. The training emphasizes integrating these skills to assist with enhancing patient outcomes and providing comprehensive, patient-centered care.

Vaccines

- Didactic
- 3.5 Hours
- Gain an understanding of vaccines by learning the types of vaccines, immunization schedules, storage requirements, vaccine allergies, interactions and adverse reactions, as well as identify the supplies and paperwork required for vaccines. Then, learn how to communicate with patients who are eligible for vaccines or are hesitant about receiving vaccines.

Vaccines Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- In this course, expand upon vaccine use and considerations for safe practice.

Smoking Cessation

- Didactic - Supporting
- 1.5 Hours
- Understand the details about options to quit smoking. Learn the pharmacological and behavioral aspects to help patients who want to quit smoking.

[End of Week 8: 12 Hours]

Emergency Preparedness

- Didactic
- 1.5 Hours
- Learn about potential emergencies that can affect the pharmacy. Plus, gain knowledge to personally prepare oneself for an emergency, in addition to the pharmacy.

Unit Exam IX

- Didactic – Exam
- 0.5
- The Unit Exam IX evaluates your understanding of the key concepts and skills covered throughout the following courses: Inventory Control and Management, Pharmacy Services, Vaccines, and Emergency Preparedness. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Endocrine Medications

- Didactic
- 1.5 Hours
- Learn basic pharmacology of medications used to treat diseases/conditions of the endocrine system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Endocrine Medications Supporting Materials

- Didactic - Supporting
- 1 Hours
- In this course, expand upon diabetes medication use and considerations for safe dispensing practice.

Gastrointestinal Medications

- Didactic
- 2 Hours
- In the following modules, you'll learn basic pharmacology of medications used to treat diseases/conditions of the gastrointestinal system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Gastrointestinal Medications Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- In this course, expand upon gastrointestinal medication use and considerations for safe dispensing practice.

Reproductive System Medications

- Didactic
- 2.5 Hours
- In the following modules, you'll learn basic pharmacology of medications used to treat diseases/conditions of the reproductive system. Course content includes terminology, therapeutic classes of drugs, indications, side effects, monitoring, interactions, precautions, and generic and brand names.

Reproductive System Medications Supporting Materials

- Didactic - Supporting
- 1 Hours
- This course gives a comprehensive review of hormonal contraception, including drug selection and error prevention. Plus, information on the safety of medications during pregnancy and breastfeeding.

Natural Medicines

- Didactic
- 0.5 Hours
- In the following module, you'll learn basic pharmacology of natural medicines, including vitamins, minerals, supplements, and homeopathic products. Course content includes terminology, therapeutic classes of products, indications, side effects, interactions, and precautions.

Natural Medicines Supporting Materials

- Didactic – Supporting
- 0.5 Hours
- This course reviews the role and importance of electrolytes. Plus, learn how to prevent mishaps when dispensing these products.

Emerging Therapies

- Didactic – Supporting
- 1 Hour
- Stay up to date on emerging therapies with this course featuring multimedia content on notable new medications and innovative updates to existing therapies. Gain valuable insights through engaging podcast discussions and webinar segments.

Unit Exam X

- Didactic – Exam
- 0.5 Hours
- Unit Exam X evaluates your understanding of the key concepts and skills covered throughout the following courses: Endocrine Medications, Gastrointestinal Medications, Reproductive Medications, and Natural Medicines. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

[End of Week 9: 13 Hours]

Compounding Calculations

- Didactic
- 3.5 Hours
- Practice pharmaceutical calculations which include infusion rates, percentages, drug concentrations, compounding, dilutions, and allegations.

Nonsterile Compounding

- Didactic
- 1.5 Hours
- Gain an understanding of simple nonsterile compounding, including equipment, techniques, and regulations.

Nonsterile Compounding Supporting Materials

- Didactic - Supporting
- 2 Hours
- Get a review on nonsterile compounding basics, including compliance, dosage forms, formulas, documentation, equipment, and techniques.

Institutional Pharmacy Dispensing Process

- Didactic
- 4 Hours
- Learn about patient charts and medication orders, preparation of patient-specific and non-patient specific meds, med delivery, and the use of automation. Practice locating all the sections and information provided on inpatient medication orders.

Institutional Pharmacy Supporting Materials

- Didactic
- 1 Hours
- Enhance your knowledge of medication dispensing and crash box management. This course covers accurate techniques for preparing and dispensing medications for surgeries, as well as best practices for assembling, organizing, and maintaining crash boxes.

Institutional Pharmacy Supporting Materials Part II

- Didactic – Supporting
- 0.5 Hours
- Review the technician's role when handling inpatient emergency situations.

Medication Reconciliation

- Didactic
- 1 Hours
- Learn about medication reconciliation, including communication tips and an interactive medication reconciliation exercise with a virtual patient.

[End of Week 10: 13.5 Hours]

Unit Exam XI

- Didactic – Exam
- 0.5 Hour
- The Unit Exam XI evaluates your understanding of the key concepts and skills covered throughout the following courses: Compounding Calculations, Nonsterile Compounding, Institutional Pharmacy Dispensing Process, and Medication Reconciliation, The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Sterile Compounding Basics

- Didactic
- 2 Hours
- Build a strong foundation in sterile compounding with this course covering the basics of sterile compounding, cleanroom standards, and primary engineering controls. Learn key concepts, procedures, and best practices to ensure a safe and compliant compounding environment.

Sterile Compounding Process

- Didactic
- 3.5 Hours
- Gain a comprehensive understanding of sterile compounding and infection control. This course covers hand hygiene, personal protective equipment, syringes, needles, supplies, equipment, and the sterile compounding process. Learn essential techniques to maintain safety, sterility, and accuracy in medication preparation.

Bloodborne Pathogens

- Didactic – Supporting
- 1 Hour
- A thorough teaching about eliminating or minimizing occupational exposure to bloodborne pathogens.

Chemotherapy Compounding

- Didactic
- 1.5 Hours
- In this course, you'll learn the details about aseptic technique and sterile compounding preparation of hazardous and chemotherapy medication. Plus, gain an understanding of the importance of biological safety cabinets and the steps to follow when cleaning chemotherapy spills.

Unit Exam XII

- Didactic – Exam
- 0.5 Hours
- The Unit Exam XII evaluates your understanding of the key concepts and skills covered throughout the following courses: Sterile Compounding Basics, Sterile Compounding Process, and Chemotherapy Compounding. The exam is designed to ensure you're prepared to use these concepts effectively in real-world situations.

Review Quizzes Part I

- Didactic - Review
- 2.5 Hours
- This course provides a review of key concepts with multiple quizzes to reinforce learning and assess understanding. Complete the quizzes designed to test knowledge and application of the learning material. The course aims to ensure a thorough grasp of the subject matter, enhancing both learning and retention through continuous assessment.

Review Quizzes Part II

- Didactic - Review
- 2.5 Hours
- This course provides a review of key concepts with multiple quizzes to reinforce learning and assess understanding. Complete the quizzes designed to test knowledge and

application of the learning material. The course aims to ensure a thorough grasp of the subject matter, enhancing both learning and retention through continuous assessment.

[End of Week 11: 14 Hours]

Review Quizzes Part III

- Didactic - Review
- 4 Hours
- This course provides a review of key concepts with multiple quizzes and interactive games to reinforce learning and assess understanding. Complete the quizzes and interactive games designed to test knowledge and application of the learning material. The course aims to ensure a thorough grasp of the subject matter, enhancing both learning and retention through continuous assessment.

Review Quizzes Part IV

- Didactic – Review
- 1.5 Hours
- This course provides a review of key concepts with multiple quizzes to reinforce learning and assess understanding. Complete the quizzes designed to test knowledge and application of the learning material. The course aims to ensure a thorough grasp of the subject matter, enhancing both learning and retention through continuous assessment.

Final Exam

- Didactic - Exam
- 2.5 Hours
- The final exam assesses your comprehensive understanding of the material covered throughout the entire course. It will test your ability to recall, apply, and integrate key concepts and skills. This exam is designed to evaluate your overall mastery of the subject and readiness to use the knowledge in real-world situations.

PTCE Review Quizzes

- Didactic – Review
- 4 Hours
- These practice quizzes are designed to help you prepare for the national certification exam. They cover essential topics and skills that align with the national certification subject domains, allowing you to assess your knowledge, identify areas for improvement, and build confidence before the actual exam.

PTCE Practice Exam

- Didactic – Exam
- 2 Hours
- The practice exam is designed to help you prepare for the national certification exam by simulating the types of questions and scenarios you will encounter. It covers essential topics and skills, allowing you to assess your knowledge, identify areas for improvement, and build confidence before the actual exam. This test provides a valuable opportunity to practice time management and familiarize yourself with the exam format, ensuring you're fully prepared for certification.

Certificate and Evaluation

- Didactic - Administrative
- 0.1 Hours
- In this final course, you'll complete the program evaluation, which will unlock your certificate, diploma, and access to the PTCB Exam registration.

[End of Week 12: 14.1 Hours]