

# PharmServ Pharmacy Technician Certification Course Outline

#### **Course 1 Outline**

- 1. Course Overview
  - a. Minimum qualifications
    - i. High school graduate or GED
    - ii. Satisfactory criminal background check
    - iii. Completion of pharmacy technician training program
    - iv. Completion of 160 hours work experience.
    - v. PTCB examination preparation
    - vi. Benefits of the Certified Pharmacy Technician (CPhT) credentials.
- 2. Pharmacy Industry
  - a. Types of pharmacy practice settings
    - i. Community/Retail
    - ii. Hospital/Institutional/Health-System
    - iii. Home healthcare/Long-term care
    - iv. Ambulatory care
    - v. Specialty pharmacy service.
- 3. Professional Conduct
  - a. Professionalism, Communication, Compassion and Teamwork
    - i. Dress code
      - 1. Professional attire
      - 2. Good personal hygiene
    - ii. Compassion
      - 1. Patients
      - 2. Co-workers
    - iii. Teamwork
      - 1. Elements of teamwork
      - 2. Hospital workflow
      - 3. Community workflow



- 1. Disruptive behavior
- 2. Demeaning behavior
- 3. Intimidating behavior
- 4. Passive-aggressive behavior
- 5. Passive disrespect
- 6. Dismissive treatment

#### v. Communication

- 1. Respectful and professional
- 2. Dealing with hostile patients
- 3. Patients with mental illness
- 4. Elderly patients
- 5. Patients with low health literacy

## vi. Cultural Sensitivity

- 1. Professional patient encounters
- 2. Religious and cultural diversity awareness
- 3. LGBTQ patient communication awareness

# 4. Roles and Responsibilities of Pharmacy Technicians

- a. Prescription preparation
  - i. Basic knowledge of prescription and Over The Counter (OTC) medications
  - ii. Knowledge of medication strengths and physical appearance
  - iii. Typical arrangement of medications in the pharmacy
  - iv. Double checking methods for accuracy and error prevention
- b. Healthcare institution medication orders preparation
  - i. Basic knowledge of Intravenous (IV) medication
  - ii. Compounding IV medications
    - 1. Basic calculations
    - 2. Aseptic techniques
- c. Filling automated dispensing cabinet (ADC)
  - i. Pyxis med station medication management
  - ii. Omnicell medication dispensing system

# 5. Processing Medication Orders and Prescription

- a. Community/Outpatient/Retail Pharmacies
  - i. Labeling requirements
  - ii. Dispensing
  - iii. Storing
- b. Hospital/Inpatient Pharmacies
  - i. Labeling requirements
  - ii. Dispensing

Prepackaging



- 6. Medication dosage forms
  - a. Liquid
  - b. Solid
  - c. Semisolid
  - d. Miscellaneous
- 7. Routes of Administration
  - a. Oral
  - b. Sublingual
  - c. Parenteral
  - d. Topical
- 8. Generic, Brand, Classification of Drugs (in relation to top 300 drugs)
  - a. Drugs that affect Nervous system
  - b. Drugs that affect Cardiovascular System
  - c. Drugs that affect Respiratory system
  - d. Drugs that affect Musculoskeletal system
  - e. Drugs that affect Endocrine system
  - f. Drugs that affect Gastrointestinal system
  - g. Drugs that affect Urinary system
  - h. Drugs that affect Women's Health
  - i. Drugs that affect Men's Health
  - j. Anti-infective
  - k. Hematologic drugs
  - 1. Drugs to treat Arthritis.
  - m. Drugs to treat Seasonal Allergies
  - n. Vitamins and Dietary Supplements
  - o. Controlled Substances
    - i. Schedules and Laws
    - ii. Labeling
    - iii. Dispensing
- 9. Pharmaceutical Calculations
  - a. Basic math
  - b. Conversions
  - c. BSA
  - d. IBW
  - e. Dosage calculations
  - f. Concentration and Dilution
  - g. IV Flow Rate
  - h. Pediatric formulation
- 10. Dosing considerations for pediatric and geriatric patients
  - a. Pediatric pharmacokinetics



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- o. Geriatric pharmacokinetics
- c. Medication safety considerations
- 11. Billing and Reimbursement (Third Party)
  - a. Self-Pay
  - b. Private insurance
  - c. Public payer
  - d. Billing for drugs and dispensing services
- 12. Inventory Management
  - a. Ordering and keeping inventory
  - b. Billing and insurance
  - c. Pharmaceutical supply chain management
- 13. IV Compounding
  - a. Sterile compounding area
  - b. Compounding technique
  - c. Compounding supplies
  - d. Labeling
  - e. Parenteral Nutrition Solutions
- 14. Patient Confidentiality
  - a. Health Insurance Portability and Accountability Act of 1996 (HIPPA)

#### **Course 2 Outline**

- 1. Students complete 160 hours of on-site training.
  - a. 80 hours at a hospital setting/health-system/institution site
  - b. 80 hours at a community/out-patient/ambulatory site

# **Course 3 Outline**

- 1. PTCB Examination Overview
  - a. PTCB exam structure
    - 1. 110-min
    - 2. 80 MCQ plus 10 questions that doesn't count in test score.



## 2.General Science knowledge

- a. Structure and function of the human body
- 3. Basic Pharmacology of Technicians
  - a. Pharmacokinetics review
    - 1. Absorption
    - 2. Distribution
    - 3. Metabolism
    - 4. Excretion
  - b. Pharmacodynamics
    - 1. Drug effects on the human body system
  - c. Understanding Basic Drug Interactions
- 4. Review of Top 300 drugs
  - a. Brand/Generic/Classification
- 5. Pharmacy Law and Regulations
  - a. Food and Drug Act
  - b. Sherley Amendment
  - c. FDA
  - d. Food, Drug, and Cosmetic Act
  - e. Durham-Humphrey Amendment
  - f. Kefauver-Harris Drug Review
  - g. Tamper-resistant Packaging Regulation
  - h. Hatch-Waxman Act
  - i. Prescription Drug Marketing Act
  - j. U.S. Food and Drug Administration Modernization Act
  - k. Medicare Prescription Drug Improvement and Modernization Act
  - 1. Project Bio Shield Act
  - m. Anabolic Steroid Control Act
  - n. Drug Safety Board
  - o. Combat Methamphetamine Epidemic Act
  - p. Requirement on Content and Format of Labeling for Human Prescription Drug and Biological Products
- 6. Sterile and Nonsterile Compounding
  - a. USP General Chapter <795>
  - b. Compounding equipment and procedures
  - c. Compounding preparations
  - d. Repackaging drugs
  - e. Beyond-use dating and labeling
  - f. Total Parenteral Nutrition Solution
  - g. Hazardous Sterile Compounding
  - h. Quality Assurance



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- 7. Medication Safety
- a. Types of medication errors
- b. Incidence
- c. Impact of medication errors
- d. Cause of medication errors
- e. Medication safety strategies
- 8. Review Medication Order Entry and Fill Process
- 9. Review Billing and Reimbursement
- 10. Typical PTCB Exam Questions Review

# COURSE Registration at www.pharmserv.net

PharmServ – we are training the next generation of Competent and Compassionate Pharmacy Technicians.