EXCELSIOR COLLEGE

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CENTER FOR PROFESSIONAL DEVELOPMENT

PHARMACY TECHNICIAN

300 Hours/12 Months/Instructor-Facilitated
Course Code: **CPD106**

OVERVIEW

Pharmacy technicians assist and support licensed pharmacists in providing health care to patients. The Pharmacy Technician online certification training program was developed in response to a rising need for trained technicians to work in hospital or retail pharmacies. The pharmacy technician profession has become indispensable to the health care field. With this growing opportunity, however, has also come increased responsibility, and this increased responsibility has made certification an important issue for many industry employers and some state legislatures. Some states now require all individuals who work as pharmacy technicians to become nationally certified.

In all parts of the country, pharmacy technicians must have a broad knowledge of pharmacy practice and must be skilled in the techniques required to order, stock, package, and prepare medications, but they don't need the advanced college education required of a licensed pharmacist. Pharmacy technicians may perform many of the same duties as a pharmacist; however, all of their work must be checked by a pharmacist before medication can be dispensed to a patient.

This program will prepare you for entry-level pharmacy technician positions by teaching you medical and pharmaceutical terminology, basic anatomy related to the pharmacology of medications, and pharmaceutical calculations. The Pharmacy Technician program will give you hands-on practice in retail pharmacy procedures through an online lab module. You'll learn what information is necessary to process prescriptions and physician orders and apply that knowledge to fill mock prescriptions. The curriculum also includes the ethics of pharmacy practice and education about prescription medications, patient care and interaction, and charges and reimbursement.

You'll learn everything you need to know to pass the National Certification Exam offered by the Pharmacy Technician Certification Board. However, you'll need to make sure that the Pharmacy Technician Program will meet your state's requirements. To check, visit your state's Board of Pharmacy site for more information. You can access this information directly from the Pharmacy Technician Certification Board (PTCB) Web site at www.ptcb.org. You can also call the state board and ask for the current technician regulations.

As a part of the Pharmacy Technician Online Certification Training Program, students are required to complete a Virtual Externship. They also have an option to perform hands-on clinical rotations (also called an externship). Clinical rotations are based on individual state board requirements.

OBJECTIVES

Upon completion of the Pharmacy Technician Program, you will:

- Understand the laws that govern pharmacy, whether federal or state-mandated
- Discuss the HIPAA requirements and their application to the pharmacy
- Interpret physician orders and prescriptions
- Prepare and distribute medications
- Define medical and pharmaceutical terms and common abbreviations
- Understand the pharmacology of medications in relation to the anatomy affected
- Perform pharmaceutical calculations
- Communicate effectively with patients and medical professionals
- Process insurance billing or collect payments
- Pass the National Certification Exam

MATERIALS INCLUDED

- *Pharmacy Practice for Technicians, 4th Edition*
- *Pocket Guide for Pharmacy Technicians*
- *Math for Pharmacy Technicians*
- *Pharmacology for Technicians: Understanding Drugs and Their Uses, 4th Edition*
- *Pharmacology for Technicians Workbook*
- Virtual Pharmacy Externship for Technicians CD-ROM
- Pharmacy lab kit
- Externship packet and lab coat provided upon acceptance into the Externship Program

OUTLINE

I. Orientation to Pharmacy

- History
- Standards
  - Education Requirements
  - Professional Organizations
  - Code of Ethics
- References
  - Text
  - Journals
  - Internet
- Community Pharmacy
  - Processing and Dispensing Prescriptions
  - Labeling Requirements
- Required Equipment
- Counter and Consulting Areas
- Storage
- Controlled Substances

- Inventory
    - Ordering
    - Restocking
- Ethics and Standards
    - Privacy
    - Confidentiality
- Accountability
- Computer Applications
    - Components
    - Order Entry
    - Systems
    - Confidentiality
- Institutional Pharmacy
    - Pharmacy Organization
    - Medication Orders
    - Dispensing Systems
    - Sterile Products
    - Inventory Control
    - Roles and Duties
    - Record Keeping
    - Policy and Procedure Manual
    - Regulatory Agencies
    - OSHA
    - PPE
    - Antiseptic Technique
    - Laminar Flow Hoods

II. Pharmacy Law and Ethics

- Federal and State Laws
    - Reference
    - Governing Bodies
    - Types of Law
    - Violations
    - Federal Laws
    - State Laws—Links
    - Agencies
    - Recalls
    - HIPAA
- Schedule of Drugs
- Ethics
    - Pharmacist Code
    - Technician Code

III. Medical and Pharmaceutical Terminology

- Introduction to Terminology
    - Word Parts
    - Rules
- Abbreviations and Calculations

- Organs: Cardio, Endocrine, GI, Integumentary
- Organs: Lymphatic, Muscular, Nervous, Skeletal, Reproductive
- Organs: Respiratory, Urinary, Hearing, Sight

IV. Pharmaceutical Calculations

- Basic Math Skills
  - Fractions and Decimals
  - Ratio, Proportions, and Percents
  - Conversions
- Community Pharmacy Math
  - Prescriptions
  - Billing and Inventory
- Institutional Pharmacy Math
  - IV Room Calculations (Ration and Percentage)
  - Dosage Calculations
  - Dilutions and Alligations

V. Pharmacology

- Unit 1: The Science of Pharmacology
  - Evolution of Drugs
  - Pharmacology
  - Administration of Pharmacological Agents
- Unit 2: Anti-Infectives and Drugs for Colds
  - Antibiotics
  - Antivirals, Antiretrovirals, and Antifungals
  - Antihistamines, Antitussives, Decongestants, and Expectorants
- Unit 3: Narcotic Pain Relievers and Nervous System Drugs
  - Anesthetics, Analgesics, and Narcotics
  - Antidepressants, Antipsychotics, and Antianxiety Agents
  - Anticonvulsants, CNS Disorder Drugs
- Unit 4: Respiratory, GI, Renal, and Cardiac Drugs
  - Respiratory Drugs
  - Gastrointestinal Drugs
  - Urinary System Drugs
  - Cardiovascular Drugs
- Unit 5: Nonnarcotic Analgesics, Muscle Relaxants, Hormones, and Topicals
  - Muscle Relaxants, Nonnarcotic Analgesics, and Arthritis Drugs
  - Hormones
  - Topicals, Ophthalmics, and Otics
- Unit 6: Chemotherapy, Herbs, and Miscellaneous Drugs
  - Recombinant Drugs and Chemotherapy
  - Vitamins, Nutritional Supplements and Natural Supplements, Antidotes, and CODE Emergency Agents

VI. Communication Skills

- Process

- Verbal and Non-Verbal
- Methods
    - Fax
    - Telephone
    - Internet
    - Pagers
    - Written
- Barriers
    - Conflict
    - HIPAA

VII. Insurance and Inventory Procedures

- Cost Analysis
- Purchasing Procedures
- Receiving
- Record Keeping
- Inventory Control
    - Computers
    - Perpetual Inventory
    - Expired
    - Formulary
    - Storage
- Repackaging
- Types of Insurance
- Claim Forms
- Billing

VIII. Lab Module

- Unit 1: Retail Lab
    - Interpreting Prescriptions
    - Counting, Measuring and Filling Containers
    - Filling Prescriptions
- Unit 2: Hospital Lab
    - Interpreting Physician Order Sheets
    - Aseptic Technique
    - Vials and Ampoules
    - IV Bags

IX. Clinical Rotations

- Virtual Externship
- Hospital
    - Research Paper
    - On-Site Rotation
- Retail
- Research Paper
    - On-Site Rotation (Walgreen's or other pharmacy)

X. Final Comprehensive Exam

COMPUTER REQUIREMENTS

This program can be taken on a Mac or PC (Windows XP or later). Adobe Flash Player and Adobe Acrobat Reader are required for this program; you will also need an Internet connection (high-speed recommended) and a working e-mail account.

INSTRUCTOR BIO

Melissa Dunworth has been a pharmacy technician for over 13 years. She lives in Albuquerque, NM. She has worked in all pharmacy arenas (retail, closed pharmacy and training/education) during her pharmacy career. Melissa currently holds a Bachelors degree in Speech and Hearing Sciences and works as a Developmental Specialist in Early Intervention for children ages 0 to 3 years. She has been a certified pharmacy technician since 1997. Melissa is also registered with the New Mexico Board of Pharmacy.

Betty Stahl has a doctorate in pharmacy from Shenandoah University. She has taught pharmacy technician programs at ASA College in New York City and ACT in Arlington, Virginia, over the past several years. Betty has also worked as a pharmacist at CVS and in hospital settings.

Lorraine C. Zentz, CPhT, Ph.D., has been a pharmacy technician since 1981. She lives in the small mountain town of Mesa, Colorado, population 400, and currently works on-call at the regional hospital in the oncology pharmacy in Grand Junction, Colorado. She has worked in all pharmacy arenas (retail, home health, hospital, oncology, and training and education) during her pharmacy career.

Lorraine received her Bachelor's degree in biology with a minor in chemistry, and her Master's degree in education with an emphasis in curriculum and instruction. She also completed her doctorate studies in adult education. She has held the position of Colorado state coordinator for NPTA and chairman of the Colorado Pharmacist Society Technician Academy, and she's been certified since 1985. In 2004 she was the recipient of the Outstanding Leadership Award and was also named Technician of the Year for the state of Colorado. Lorraine conducts continuing education programs for technicians throughout Colorado and nationally at the annual NPTA convention.