

Unit Lesson	Lesson Objectives
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Pharmacy Technician Roles

The Role of Pharmacy Technicians

Describe the attributes of an effective pharmacy technician.

Discuss the organizational flow of responsibilities within a pharmacy setting.

Identify the duties of a pharmacy technician.

PTCB Certification

Differentiate between licenses and certificates.

Explain the PTCB certification process.

Recall regulations that impact pharmaceutical practices.

Ethics

Analyze the importance of good ethical practices.

Define Code of Ethics.

Identify ethical principles that apply to pharmacy technicians.

Professionalism in the Workplace

Describe proper telephone and in-person etiquette when working with customers.

Explain the importance of professionalism in the workplace.

Identify professional standards of behavior.

Communication

Discuss communication concepts and strategies that enhance workplace communication.

Identify and overcome communication barriers.

Recall effective ways to communicate with customers of varying backgrounds.

Teamwork

Describe the role of teams in pharmacy settings.

Explain the organization, structure, and functions of healthcare teams.

Identify effective teamwork skills that can be used to build positive working relationships.

Confidentiality

Define confidentiality and privileged communications in healthcare settings.

Explain how the Health Insurance Portability and Accountability Act (HIPAA) helps protect patient confidentiality.

Identify when it is appropriate and inappropriate to share healthcare information.

Pharmacy Environments

Retail Setting

Describe how retail pharmacies operate.

Explain the characteristics of retail settings.

Identify different types of pharmacy retail settings.



Hospital Setting

Describe professional interactions with hospital staff.

Explain practice standards related to hospital pharmacies.

Identify pharmacy technician duties in hospital pharmacy settings.

Pharmacy Standards

Define the role of the technician in quality assurance activities.

Describe security systems and safeguards for pharmaceutical effectiveness and safety.

Explain the purpose of quality management within the pharmacy.

Identify standards that apply to pharmacy technicians.

Pharmacy Policies and Procedures

Explain the impact that OSHA and the CDC have on pharmacy policies and procedures.

Explain the purpose of having policies and procedures.

Identify the contents of a pharmacy policy and procedure manual.

Important Pharmacy References

Describe the main contents of various pharmacy references.

Distinguish between various pharmacy references.

Identify drug information sources used in the pharmacy setting.

Pharmacology

Prescription Terminology

Define the meaning of prescription terms.

Identify abbreviations and terminology used on prescriptions.

Use prescription terminology in real-life scenarios.

Prefixes, Roots, and Suffixes

Identify common prefixes used in pharmaceutical terminology.

Identify common root words used in pharmaceutical terminology.

Identify common suffixes used in pharmaceutical terminology.

Organ System Terminology

Describe how pharmacology impacts health and organ systems.

Explain why pharmacy technicians need to know about organ systems.

Identify basic organ system terminology.

How Drugs Work

Define poison.

Explain how drugs work in the body.

Explain how placebos are used.



Unit Lesson Lesson Objective

Addiction

Define drug addiction.

Explain how drugs have an addictive effect on the body.

Equivalence

Define therapeutic equivalence.

Describe the FDA approval process for drugs.

List the FDA criteria for therapeutic equivalent drugs.

Drug Manufacturing and Naming

Describe how drugs are manufactured.

Describe the processes for developing and testing drugs prior to FDA approval.

Explain the naming process for drugs.

List regulations associated with drug manufacturing.

Manufactured Drug Forms

Differentiate the characteristics of various drug forms.

Identify the most common forms in which drugs are manufactured.

Identify uses for different drug forms.

Routes of Administration

Describe the therapeutic effects of different drugs based on their routes of administration.

Identify the routes of administration for medication.

Drug Interactions

Define a drug interaction.

Describe how to educate patients about drug interactions.

Identify different types of drug interactions.

Drugs and Body Systems Part I

Urinary System Drugs

Describe the pharmacologic actions and indications for drugs used to treat UTIs.

Identify common drugs used to treat health conditions related to the urinary system.

Match urinary diseases and disorders to drugs.

Gastrointestinal System Drugs

Describe the pharmacologic actions and indications for drugs used to treat heartburn, peptic ulcers, and reflux.

Identify common drugs used to treat health conditions related to the gastrointestinal system.

Match gastrointestinal diseases and disorders to drugs.



Musculoskeletal System Drugs

Describe the pharmacologic actions and indications for drugs used to treat osteoporosis and arthritis.

Identify common drugs used to treat health conditions related to the musculoskeletal system.

Match musculoskeletal diseases and disorders to drugs.

Pulmonary System Drugs

Describe the pharmacologic actions and indications for drugs used to treat asthma and respiratory infections.

Identify common drugs used to treat pulmonary diseases and disorders.

Match pulmonary diseases and disorders to drugs.

Cardiovascular System Drugs

Describe the pharmacologic actions and indications for drugs used to treat congestive heart failure and myocardial infarction.

Identify common drugs used to treat health conditions related to the cardiovascular system.

Match cardiovascular diseases and disorders to drugs.

Hematologic Drugs

Describe the pharmacologic actions and indications for drugs used to treat anemia and hemophilia.

Identify common hematologic drugs.

Match hematologic diseases and disorders to drugs.

Drugs and Body Systems Part II

Obstetric and Gynecologic Drugs

Describe the pharmacologic actions and indications for drugs used to treat infertility, postpartum depression, and menstrual disorders.

Identify common gynecologic drugs.

Identify common obstetric drugs.

Endocrine System Drugs

Describe the pharmacologic actions and indications for drugs used to treat diabetes.

Identify common drugs used to treat health conditions related to the endocrine system.

Match endocrine diseases and disorders to drugs.

Neurologic Drugs

Describe the pharmacologic actions and indications for drugs used to treat neuropathy, multiple sclerosis, and insomnia.

Identify common neurologic drugs.

Match neurologic diseases and disorders to drugs.

Psychiatric Drugs

Describe the pharmacologic actions and indications for drugs used to treat depression, anxiety, and psychosis.

Identify common psychiatric drugs.

Match psychiatric diseases and disorders to drugs.



Dermatologic Drugs

Describe the pharmacologic actions and indications for drugs used to treat acne and skin infections.

Identify common dermatologic drugs.

Match dermatologic diseases and disorders to drugs.

Drugs for the Eyes, Ears, Nose, and Throat

Describe the pharmacologic actions and indications for drugs used to treat disorders that affect the eyes, ears, nose, and throat.

Identify common drugs used for health issues of the eyes, ears, nose, and throat.

Match sensory diseases and disorders to drugs.

Drug Classifications

Top 100 Drugs

Classify the top 100 drugs.

Identify the top 100 drugs.

Recall the main indications for popular retail drugs.

Drug Indications

Define what a main indication is.

Identify common drug indications.

Recall examples of drugs based on their indications.

Drug Classes

Describe the importance of regulating controlled substances.

Explain what controlled substances are.

Identify drugs that look alike/sound alike.

Identify major classifications of pharmaceuticals.

Over-the-Counter (OTC) Drugs

Define OTC medications.

Describe the history of drug regulation.

Explain the pharmacy technician's role in assisting patients with OTC medications.

Drugs Used to Treat HIV/AIDS

Define anti-infective drugs.

Explain how anti-infective drugs work in the body.

Identify drugs used to treat HIV/AIDS.

Drugs Used to Treat Cancer

Define chemotherapy drugs.

Explain how chemotherapy drugs work in the body.

Identify drugs used for chemotherapy.



Other Drugs Used with Chemotherapy

Define anti-emetic drugs.

Identify drugs that are used to protect against chemotherapy toxicity.

Provide examples of drugs used with chemotherapy.

Anesthetic Drugs

Define anesthetic drugs.

Explain the pharmacologic actions and indications of anesthetic drugs.

Identify common anesthetic drugs.

Identify risk factors associated with the use of anesthetic drugs.

Emergency Drugs

Compare and contrast various types of emergency drugs.

Describe how and when emergency drugs are used.

Explain what emergency drugs are.

Intravenous Drugs

Analyze the methods of administration for intravenous fluids.

Define the term "intravenous."

Explain how intravenous drugs are used and how they work.

Prescriptions

Receiving a Prescription

Describe the process for receiving prescriptions.

Identify appropriate practice standards for receiving prescriptions.

Recall pharmacy policies involving the receipt of prescriptions.

Requesting a Refill

Describe how pharmacies receive refill requests.

Explain ways technicians can prevent prescription errors.

Name the steps for completing refill requests.

Processing a Prescription

Describe how quality improvement plays a role in processing prescriptions.

Explain how prescriptions get processed.

Identify the equipment necessary for processing prescriptions.

Interpret prescription information and translate it into language that patients can understand.



Filling a Prescription

Analyze the types of errors that can occur during the prescription-filling process.

Identify appropriate practice standards for filling prescriptions.

Identify the steps for filling prescriptions.

Interacting with Insurance Companies

Describe the process for contacting insurance companies.

Describe the role of third-party payers in paying for prescription drugs.

Explain when it is appropriate or necessary to contact insurance companies.

Prior Authorizations

Analyze the impact prior authorizations have on reimbursement.

Define prior authorization.

Describe the process for obtaining prior authorizations.

Explain the importance of prior authorizations.

Schedules and DEA Numbers

Define DEA numbers.

Define drug schedule.

Explain the importance of drug schedules.

Explain the procedure for verifying DEA numbers.

Completing a Transfer

Describe how a drug transfer is completed.

Identify state-specific transfer regulations.

Labeling Prescriptions

Explain how labels can be used to check product expiration dates.

Identify the steps for labeling prescriptions.

Recall requirements for packaging medications.

Formularies

Define formulary.

Describe how formularies are used.

Explain why formularies are necessary.

Calculations, Routes, and Formulations

Computer Skills for the Pharmacy Technician

Explain how to use computers to store important information.

Identify computer applications used in pharmacies.

Identify the basic computer skills necessary for pharmacy technician careers.



Math Skills for the Pharmacy Technician

Identify basic math skills necessary for pharmacy technician careers.

Identify when to use numerals, fractions, and decimals in pharmacy settings.

Perform arithmetic operations.

Perform mathematic calculations based on numerals, fractions, and decimals.

Proportions and Quantity

Interpret quantitative data related to pharmaceuticals.

Perform quantity calculations using proportions and cross multiplication.

Use quantity calculations to solve pharmacy-related problems.

Measurements and Conversions

Identify common measurements used in a pharmacy.

Perform calculations related to conversions and measurements.

Review of Measurement, Conversion, Proportion, and Quantity Calculations

Perform measurements and conversions.

Perform proportion and quantity calculations.

Percentages and Dilutions

Interpret charts, tables, and graphs related to prescriptions and pharmaceuticals.

Perform calculations related to percents and dilutions using cross multiplication.

Calculating Dosages

Calculate adult dosages.

Calculate child dosages.

Compare and contrast child and adult medication dosages.

Perform dosage calculations based on real-life scenarios.

Review of Dosage and Dilution

Perform calculations related to dosage and dilution.

Parenterals and Admixtures

Calculating Parenterals

Calculate parenterals.

Define parenterals.

Explain how to prepare total parenteral nutrition (TPN) solutions.

Admixtures

Define an IV admixture.

Discuss fluid and electrolyte therapy.

Identify the steps for preparing IV admixtures.



Sterile Dosage and Laminar Flow Hoods

Analyze aspectic techniques for withdrawing medication and maintaining laminar flow hoods.

Differentiate between two types of hoods.

Explain how laminar flow hoods work.

Identify procedures for limiting contamination of parenteral products.

Solution Types

Distinguish between SVPs and LVPs.

Identify different solution types.

Recall the characteristics of IV solutions.

Compounding

Calculating Compounds

Define compounding.

Demonstrate compound calculations using real-life scenarios.

Explain how to calculate and prepare compounds.

Compounding Equipment

Describe the procedure for Class A prescription balance.

Identify compound equipment.

Identify when to use a bulk and analytical balance.

Recall compound recipes.

Regulations

Define USP 797.

Explain why it is necessary for pharmacy technicians to comply with regulatory standards.

Identify regulations related to compounding.

Forms of Compounding

Analyze examples of compounding.

Identify different forms of compounding.

Recall the principles of compounding.

Pharmacy Law

Important Drug Laws, Amendments, and Acts

Describe amendments and their impact on the field of pharmacology.

Explain the CSA classification of drugs.

Identify major pharmacy laws.



Nuclear Pharmacy

Define nuclear medicine.

Explain the importance of regulation and safety in the nuclear pharmacy.

How Drugs Get on the Market

Describe how drugs get on the market.

Explain the impact that pharmaceutical developments have on the practice of pharmacy.

Explain the process for drug distribution.

Drug Recalls

Define a drug recall.

Describe how to handle drug recalls at the pharmacy level.

Summarize the FDA's classification of recalls.

DEA Order Forms

Define DEA order forms.

Describe how to complete a DEA order form.

Explain the purpose of DEA registration.

Inventory Management

Ordering of Pharmacy Stock

Describe how to maintain stock inventory.

Explain the importance of inventory control.

Identify the process for ordering pharmacy stock.

Receiving Pharmacy Inventory

Discuss various types of inventory equipment.

Identify packaging requirements.

Summarize the inventory-receiving process.

Returning Products

Describe the process for returning products.

Explain the condition of products that need to be returned.

Explain the relationship between returning products and quality control in the pharmacy.

Controlled Drugs

Define a controlled drug.

Distinguish among the five schedules of controlled substances.

Explain how to maintain a controlled substance inventory.



Generic Substitutes

Describe when generic substitutes are typically used.

Explain the significance of generic substitutes.

Identify what a generic drug is.

Removal and Disposal of Drugs

Describe how to properly dispose of biohazardous materials.

Identify processes and procedures for removing and disposing pharmaceutical materials.

Recall when to remove or dispose of pharmaceutical materials.

Drug Storage and Stability

Describe proper storage conditions for several common drugs.

Identify the connection between the storage of drugs and their effectiveness.

Recall how to identify expiration dates.

Pharmacy Management

Pharmacy Management

Analyze the duties of a pharmacy manager.

Describe how pharmacies are managed effectively.

Identify common management styles.

Pharmacy Record Keeping

Describe the procedures for maintaining pharmacy records.

Explain the importance of pharmacy record keeping.

Identify parties that have access to pharmacy records.

Dealing with Hazardous Materials

Explain how to handle hazardous materials.

Identify hazardous materials in pharmacy settings.

Recall OSHA guidelines for working proximal to hazardous materials.

Patient Education

Describe patient safety and education goals.

Explain the importance of patient education.

Identify ways that patients can access pharmaceutical information.



Risk Management

Define risk management.

Describe the pharmacy technician's role in risk management protocols.

Explain how risk management applies to pharmacy settings.

Third-Party Billing

Define third-party billing.

Explain how to process third-party claims.

Explain third-party reimbursement.

List common third-party billers.