UTAH SYSTEM OF HIGHER EDUCATION

Utah System of Higher Education
Pharmacy Technician
FY2027 / 13 Credits (450 Clock-Hours)

Foundational Courses

TEPT 1010 Introduction to Pharmacy — 3 Credits / 90 Clock-Hours

This course serves as an introduction to the pharmacy technician profession, pharmacy technician roles, and the different types of pharmacies within the healthcare delivery system. Students are introduced to state and federal pharmacy practice laws, and the pharmacists' patient care process. Students learn the concepts of pharmacology, medications, and calculations needed to ensure patient safety.

Objectives:
• Compare and contrast the pharmacy technician’s role, pharmacist’s role, and other occupations in the healthcare environment.
• Describe and apply state and federal laws pertaining to pharmacy practice.
• Recognize and apply the pharmacists' patient care process.
• Relate the basic history of pharmacy to today's pharmacy practice.
• Demonstrate the technicians' role in the medication use process.

TEPT 1100 Community Pharmacy Practice — 3 Credits / 90 Clock-Hours

This course teaches the skills necessary for working in community pharmacy settings. Students perform hands-on skill simulations including data entry, prescription processing, billing, fulfillment, inventory management, customer service, and patient safety.

Objectives:
• Identify the most utilized drugs by brand and generic name and their indications.
• Recognize common drug interactions.
• Perform essential duties and functions of a pharmacy technician in a community pharmacy.
• Describe major trends, issues, goals, and initiatives taking place in the pharmacy profession.
• Initiate, verify, and manage billing for complex and/or specialized pharmacy services and goods.
• Apply interpersonal skills, including negotiation skills, conflict resolution, customer service, communicating patient safety, and teamwork.

TEPT 1110 Institutional Pharmacy Practice — 3 Credits / 90 Clock-Hours

This course teaches the skills necessary for working in institutional pharmacy settings. Students will utilize hands-on skill simulations of institutional pharmacy responsibilities including sterile compounding and aseptic technique, hazardous drug management, unit dosing and dispensing, patient safety, and communication with hospital staff.

Objectives:
• Practice and adhere to effective infection control procedures.
• Prepare compounded sterile preparations per applicable, current United States Pharmacopeia chapters.
• Demonstrate knowledge of anatomy, physiology and pharmacology, and terminology relevant to the pharmacy technician’s role.
• Perform essential duties and functions of a pharmacy technician in an institutional setting.
• Describe the different methods of drug delivery and administration within institutional settings.
• Practice patient safety and communication with hospital staff.

Externship Course (Choose one)

TEPT 1900 Pharmacy Technician Externship **4 Credits / 210 Clock-Hours**

In this course, students will demonstrate their abilities to function as a pharmacy technician in industry settings. This experience takes place under the supervision of a pharmacist or an experienced pharmacy technician and includes a combination of skills-practice and evaluation.

Objectives:
• Assist pharmacists in collecting, organizing, and recording patient information.
• Maintain pharmacy facilities and equipment.
• Receive, process, and prepare prescriptions/medication orders.
• Demonstrate a respectful and professional attitude when interacting with diverse patient populations and medical professionals.
• Participate in pharmacy compliance with professional standards and relevant legal, regulatory, formulary, contractual, and safety requirements.

TEPT 1910 Pharmacy Technician Externship **4 Credits / 180 Clock-Hours**

In this course, students will demonstrate their abilities to function as a pharmacy technician in industry settings. This experience takes place under the supervision of a pharmacist or an experienced pharmacy technician and includes a combination of skills-practice and evaluation.

Objectives:
• Assist pharmacists in collecting, organizing, and recording patient information.
• Maintain pharmacy facilities and equipment.
• Receive, process, and prepare prescriptions/medication orders.
• Demonstrate a respectful and professional attitude when interacting with diverse patient populations and medical professionals.
• Participate in pharmacy compliance with professional standards and relevant legal, regulatory, formulary, contractual, and safety requirements.

Supplemental Courses Varies by Institution

Bridgerland

TEPT 1200 Advanced Community Pharmacy Practice **1 Credit / 30 Clock-Hours**

This course teaches advanced skills utilized in a community pharmacy. Students will perform hands-on skill simulations of non-sterile compounds, demonstrate proper use of non-sterile compounding equipment, administer immunizations, perform point-of-care testing, and follow proper documentation protocols.

Objectives:
• Solve mathematical calculations pertaining to non-sterile compounding.
• Prepare medications requiring simple, moderate, and high-level non-sterile compounding as defined by United States Pharmacopeia (USP).
• Process, handle, and demonstrate immunization administration techniques.
• Explain and perform point-of-care testing.
• Demonstrate ability to effectively and professionally communicate with diverse patient populations.

TEPT 1210 Advanced Institutional Pharmacy **3 Credits / 90 Clock-Hours**

This course teaches advanced skills necessary in institutional pharmacy settings. Students will demonstrate aseptic techniques, advanced sterile compounding, and hazardous sterile compounding.

Objectives:
• Analyze medication orders and process prescription labels for sterile compounded medications.
• Utilize mathematical calculations required for sterile compounding.
• Practice and master aseptic technique.
• Prepare sterile and hazardous sterile compounds.
• Demonstrate safety procedures in accordance with the United States Pharmacopeia (USP) chapters 797 and 800.

Davis

TEPT 1500 Pharmacy Technician Math **1 Credit / 30 Clock-Hours**

Pharmacy Technician Math examines basic mathematic skills and math concepts related to the pharmacy industry. During this course, you will study systems of measurement, formulas, intravenous flow rates, and other calculations used in the pharmacy industry. Upon completing this course, students will have a strong foundation in required mathematics and an introduction to the terminology and abbreviations used in pharmaceutical occupations.

Objectives:
• Learn and apply basic math skills, including proportions, formulas, and conversions.
• Calculate oral doses using ratio-proportion, formulas, and dimensional analysis.
• Compute and/or use percentage of error.
• Identify the elements of a prescription order and a typical drug label.
• Use allegation and other formulas to change a product’s concentration by adding diluents or mixing stock solutions.
• Calculate intravenous flow rates.
• Compute discounts and markups.

TEPT 1631 Pharmacy Comprehension **2 Credits / 60 Clock-Hours**

Pharmacy Comprehension provides firsthand experience in the major fields of pharmacy. During this course, you will review administrative aspects of pharmacy, safety components, and a deeper dive into the components of pharmacy that have already been covered (community pharmacy and institutional pharmacy). Students will fill multiple prescriptions from start to finish, practice customer service skills, learn about STAT medications, demonstrate more complex scenarios regarding proper aseptic technique while working on or within laminar flow hoods, efficiently filling an IV bag, and properly compounding nonsterile medications. In this course, students will study and then demonstrate expertise via lab pass-offs and role-playing in the varying pharmacy fields.

Objectives:
• Define:
o FDA.
o DEA.
o ISMP.
o Drug Recall Categories.
o Safety Organizations.
o Adverse Reactions.
o Medication Errors.
o Different parts of Medicare and Medicaid.
• Calculate:
o AWP Rates.
o Markup Rates.
o Days' Supply.
• Explain:
o The role administrative organizations play in pharmacy.
o The role of the pharmacy technician during billing and reimbursement.
o The differences between private and government insurance.
o The importance of medication error prevention and patient safety.
o Pharmacy Administrations.
o Pharmacy Reimbursement.
o The inner workings of retail, hospital, compounding, and long-term care pharmacy.
• Demonstrate time management, stress management, and other workplace skills.

WKSK 1500 Job Seeking Skills **1 Credit / 30 Clock-Hours**

Job Seeking Skills explores how to prepare and successfully apply to potential career opportunities. During this course, you will be presented with essential job-seeking skills needed to find gainful employment.

Objectives:
• Create a professional resume, cover letter and reference sheet.
• Utilize online tools successfully to create an e-portfolio.
• Expand and develop networking skills.
• Utilize online resources effectively to find job openings.
• Demonstrate the ability to fill out job applications in a professional manner.
• Perform successfully in a job interview.
• Demonstrate appropriate follow-up procedures.

Dixie

TEPT 1410 Pharmacy Technician Success and Career Readiness **3 Credits / 90 Clock-Hours**

This course prepares students for successful completion of either the Pharmacy Technician Certification Board (PTCB) or ExCPT national certification examination and Utah State licensure requirements. Students engage in comprehensive exam review, practice assessments, and test-taking strategies while identifying individual knowledge gaps. The course also emphasizes professional behaviors, ethical conduct, communication, self-management, and employability skill development including résumé creation, mock interviews, job search strategies, and workplace professionalism. Students complete credentialing documentation and transition-to-externship readiness activities to support entry into pharmacy practice.

Objectives:
• Complete exam prep activities using foundational pharmacy technician knowledge including physiology, pharmacology, medical terminology, and calculations.
• Take practice assessments and employ test-taking strategies to identify learning gaps and improve exam performance.
• Describe state licensure and national certification requirements and professional responsibilities of pharmacy technicians.
• Perform pharmacy technician duties in a simulated pharmacy environment using professional and respectful communication, customer service and positive teamwork
• Create a professional résumé and demonstrate job search skills.
• Apply self-management, time management, and readiness skills necessary for externship and entry-level employment.

TEPT 1521 Medications **2 Credits / 60 Clock-Hours**

This course will provide a deeper understanding of the top 200+ medications. Students will gain the ability to recite the brand name, generic name, classification, and indication of the most prescribed medications currently dispensed in pharmacies.

Objectives:
• Recognize medications by either brand or generic name.
• Describe the DEA schedules and medications that fall into each schedule and why.
• Identify different illnesses, diseases, and the class of drugs required to treat them.
• Explore complementary and alternative drug therapies.
• Identify medications that require special handling, documentation, and patient instruction.

Ogden-Weber

TEPT 1300 Clinical Pharmacology **2 Credits / 60 Clock-Hours**

This course covers pharmacy terminology, SIG code, dosage forms, and abbreviations for successful transcription of prescriptions in the pharmacy setting. This course will link drug therapeutic classes with the affected body systems and medical conditions and include common drug interactions, contraindications and side effects. Drug reference materials and the drug approval process will also be covered.

Objectives:
• Memorize the most common drugs by brand name, generic, and therapeutic class.
• Describe how medications are developed and approved.
• Identify the different drug dosage forms and routes of administration.
• Interpret pharmacy SIG code and common pharmacy abbreviations.

TEPT 1530 Body Systems and Medical Conditions **2 Credits / 60 Clock-Hours**

This course covers the major body systems, their dysfunctions, and treatment of diseases using medications. Medical terminology as it pertains to pharmacy practice and therapeutic classes of drugs used to treat common conditions will also be included in this course.
• Identify the major body systems.
• Define common diseases and medical conditions.
• Translate common medical terminology.
• Describe the major therapeutic classes of medications used to treat diseases and conditions.

TEPT 1615 Pharmacy Simulations and Review **2 Credits / 60 Clock-Hours**

This course includes hands-on skills performed in a sequential manner, simulating daily operations in a variety of pharmacy settings. Advanced-pharmacy technician roles will include immunization and CPR certification, point of care testing, advanced non-sterile, sterile, and hazardous compounding, and pharmacy supervisory duties. Additionally, this course includes practice resources for the national certification exam.

Objectives:
• Perform advanced non-sterile, sterile, and hazardous compounding skills.
• Simulate daily retail, specialty and Institutional pharmacy operations by practicing previously learned skills in sequence.
• Apply supervisory roles, teamwork, and problem solving to pharmacy simulation.
• Prepare to administer immunizations following CDC and Utah State Guidelines.
• Earn a BLS Provider CPR certificate from The American Heart Association to comply with ASHP requirements.
• Prepare for externship placement.
• Prepare for the national certification exam.

Salt Lake

TEPT 1310 Advanced Pharmacy Technician Skills **4 Credits / 120 Clock-Hours**

This course explores technician roles in sterile compounding, diversion, supply chain management, medication history, therapy management and leadership. Course teaches technical skills needed to support career progression. Students will demonstrate skill mastery through case studies, critical thinking exercises and routine skill assessment.

Objectives:
• Describe the expanding roles training, and skill open to the pharmacy technician.
• Demonstrate interdisciplinary leadership and team management skills in the pharmacy setting.
• Monitor patient medication compliance, education, and tracking to assist the pharmacist.
• Demonstrate principles of sterile and hazardous material compounding with vials, ampules, small and large volume parenterals and automated compounding equipment.
• Outline points of a controlled substance diversion and tracking system.
• Demonstrate techniques for receipt, storage, handling, delivery, and disposal of hazardous drugs, materials, and ingredients.

Southwest

TEPT 1220 Sterile Compounding **1 Credit / 30 Clock-Hours**

Sterile Compounding will teach students how to operate in a sterile environment and keep solutions, dilutions, and medications contaminant free. Students will be shown how to use and clean various compounding equipment.

Objectives:
• Explain the functions and limitations of compounding equipment.
• Summarize common contaminations and how to prevent them.
• Employ the basics of a cleanroom.

TEPT 1522 Pharmacy Calculations **2 Credits / 60 Clock-Hours**

This course builds upon basic mathematic skills to include the application of mathematics in the pharmacy setting. This course will cover calculations for medication dosing and day supplies in both community and institutional pharmacies. Common business and inventory calculations used in the pharmacy will also be included in this course.

Objectives:
• Apply mathematics to calculations most often used in the pharmacy setting.
• Describe common household and metric conversions.
• Calculate correct dosages and days supply for medications.
• Explain key concepts such as time, temperature, volume, and weight.
• Perform advanced calculations for compounded drug products and sterile preparations.

TEPT 1610 Pharmacy Review **1 Credit / 30 Clock-Hours**

Pharmacy Review will have students review material from Intro to Pharmacy, Community Pharmacy Practice, Pharmacy Calculations, and Institutional Pharmacy Practice. It will prepare students to take their national exams and be ready for their future employment.

Objectives:
• Demonstrate a foundational understanding of retail, hospital, and compounding pharmacies.
• Perform basic interactions between technicians, healthcare professionals, and patients.
• Perform calculations and procedures related to dosages, dilutions, days supply, and the prescription filling process.

Tooele

TEPT 1230 Extemporaneous, Nonsterile Compounding **2 Credits / 60 Clock-Hours**

This course teaches the skills necessary for working in nonsterile compounding to prepare medications strengths, combinations, or dosage formulations that are not commercially available. Students will utilize hands-on skill simulations of Nonsterile compounding, responsibilities including following each step in the compounding process as outlined in the Master Formulation Record; and USP Standard. The students will utilize instruments for weighing and measuring. Extemporaneous compounds commonly include a digital scale or a analytical two-pan balance, pharmaceutical weights, forceps, spatulas, weighing papers, ointment slab, parchment paper, mortar and pestle, graduated cylinders; and pipettes among others.

Objectives:
• Define the terms compounding, extemporaneous, nonsterile, sterile, and anticipatory compounding.
• Discuss the distinction between a manufactured drug and a compounded nonsterile medication, and preparation and purpose of USP Chapter 795.
• Explain the differing techniques by which solutions, suspensions, ointment, creams, powders, suppositories, rapid dissolving tablets, troches and capsules are prepared.
• Perform essential duties and functions of a pharmacy technician in preparing solutions, suspensions, ointment, creams, powders, suppositories, rapid dissolving tablets, troches and capsules are prepared.
• Explain the final compounding steps including calculating beyond-use-dating, labeling, offering patient education; doing clean-up, and equipment maintenance.
• Practice patient safety and communication with staff.
• Performing compounding steps including calculating beyond-use-dating, labeling, offering patient education; doing clean-up, and equipment maintenance.

TEPT 1240 Sterile and Hazardous Compounding **2 Credits / 60 Clock-Hours**

This course teaches the skills necessary for working in sterile and hazardous compounding to prepare medications for intravenous (IV) use. Students will utilize hands-on skill simulations of sterile and hazardous compounding responsibilities including following each step in the compounding process as outlined in USP Compounding 797 Sterile Compounding, and USP Chapter 800 Hazardous Compounding. The students will explain general principles in sterile and hazardous compounding with vials ampules and automated sterile compounding equipment. Paraphrase the handling of premade parental products, including vial-and-bag systems and frozen intravenous sterile solutions. Extemporaneous compounds commonly include a digital scale or a analytical two-pan balance, pharmaceutical weights, forceps, spatulas, weighing papers, ointment slab, parchment paper, mortar and pestle, graduated cylinders, and pipettes among others.

Objectives:
• Define the terms compounding, extemporaneous, nonsterile, sterile, hazardous, nuclear, and anticipatory compounding.
• Define the sterile compounding process, which follows USP Chapter 797.
• Define hazardous drugs and the categories of risk of exposure and the different levels of primary engineering controls for compounding them, according to USP Chapter 800.
• Explain the differing for receiving, storing, handling, delivering, and disposing of hazardous drugs and ingredients, and the function and contents of a spill kit.
• Perform essential duties and functions of a pharmacy technician in preparing sterile and Hazardous medications.
• Explain the final compounding steps including calculating beyond-use-dating, labeling, and doing clean-up and equipment maintenance.
• Practice patient safety and communication with staff.
• Discuss the role of USP’s evolving standards in Nuclear Pharmaceutical compounding.

Uintah Basin

TEPT 1230 Extemporaneous, Nonsterile Compounding **2 Credits / 60 Clock-Hours**

This course teaches the skills necessary for working in nonsterile compounding to prepare medications strengths, combinations, or dosage formulations that are not commercially available. Students will utilize hands-on skill simulations of Nonsterile compounding, responsibilities including following each step in the compounding process as outlined in the Master Formulation Record; and USP Standard. The students will utilize instruments for weighing and measuring. Extemporaneous compounds commonly include a digital scale or a analytical two-pan balance, pharmaceutical weights, forceps, spatulas, weighing papers, ointment slab, parchment paper, mortar and pestle, graduated cylinders; and pipettes among others.

Objectives:
• Define the terms compounding, extemporaneous, nonsterile, sterile, and anticipatory compounding.
• Discuss the distinction between a manufactured drug and a compounded nonsterile medication, and preparation and purpose of USP Chapter 795.
• Explain the differing techniques by which solutions, suspensions, ointment, creams, powders, suppositories, rapid dissolving tablets, troches and capsules are prepared.
• Perform essential duties and functions of a pharmacy technician in preparing solutions, suspensions, ointment, creams, powders, suppositories, rapid dissolving tablets, troches and capsules are prepared.
• Explain the final compounding steps including calculating beyond-use-dating, labeling, offering patient education; doing clean-up, and equipment maintenance.
• Practice patient safety and communication with staff.
• Performing compounding steps including calculating beyond-use-dating, labeling, offering patient education; doing clean-up, and equipment maintenance.

TEPT 1240 Sterile and Hazardous Compounding **2 Credits / 60 Clock-Hours**

This course teaches the skills necessary for working in sterile and hazardous compounding to prepare medications for intravenous (IV) use. Students will utilize hands-on skill simulations of sterile and hazardous compounding responsibilities including following each step in the compounding process as outlined in USP Compounding 797 Sterile Compounding, and USP Chapter 800 Hazardous Compounding. The students will explain general principles in sterile and hazardous compounding with vials ampules and automated sterile compounding equipment. Paraphrase the handling of premade parental products, including vial-and-bag systems and frozen intravenous sterile solutions. Extemporaneous compounds commonly include a digital scale or a analytical two-pan balance, pharmaceutical weights, forceps, spatulas, weighing papers, ointment slab, parchment paper, mortar and pestle, graduated cylinders, and pipettes among others.

Objectives:
• Define the terms compounding, extemporaneous, nonsterile, sterile, hazardous, nuclear, and anticipatory compounding.
• Define the sterile compounding process, which follows USP Chapter 797.
• Define hazardous drugs and the categories of risk of exposure and the different levels of primary engineering controls for compounding them, according to USP Chapter 800.
• Explain the differing for receiving, storing, handling, delivering, and disposing of hazardous drugs and ingredients, and the function and contents of a spill kit.
• Perform essential duties and functions of a pharmacy technician in preparing sterile and Hazardous medications.
• Explain the final compounding steps including calculating beyond-use-dating, labeling, and doing clean-up and equipment maintenance.
• Practice patient safety and communication with staff.
• Discuss the role of USP's evolving standards in Nuclear Pharmaceutical compounding.

USU-Eastern

TEPT 1320 Pharmacology **3 Credits / 90 Clock-Hours**

This course teaches students to integrate pharmacology knowledge into clinical practice, manage medication safety issues in patient care, and find needed additional drug information or legal requirements of medication prescribing and use. Information is conveyed through lectures and multimedia presentations.

Objectives:
• Describe principles of general chemistry, cell biology, and human physiology and pathology.
• Demonstrate the ability to utilize online medication resources.
• Demonstrate knowledge of the brand and generic names and therapeutic category for the top 200 most commonly prescribed medications in the U.S.
• Practice using drug references to obtain information on medications to be administered, prescribed, or otherwise used in practice settings.
• Demonstrate understanding of the core principles of pharmacology, and the characteristics, use, precautions of key representative medications from all major therapeutic categories.

TEPT 1620 National Exam and State Licensure Readiness **1 Credit / 30 Clock-Hours**

This course prepares students for the National Exam and Utah State Licensure exam through a series of practice exams and quizzes based on examination content blueprints. The exams will allow the student and instructor to analyze areas of likely success and areas that may need further review.

Objectives:
• Gain familiarity with common test taking mistakes and develop strategies to overcome them.
• Utilize knowledge learned in the Pharmacy Technician program to successfully identify the correct information on the National Exam and State Licensure exam.
• Demonstrate knowledge of program accreditation outcome requirements including sitting for and passing licensure exam.
• Describe legal requirements of medication prescribing and use.
• Describe the requirements for obtaining and maintaining licensure and certification.