PHT 63: PHARMACY TECHNICIAN CERTIFICATION EXAM (PTCE) REVIEW

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	2
Hours:	2 lecture per week (24 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Students will successfully pass the National Pharmacy Technician Exam with a 70% or higher.
- Students will complete the California State License requirements and be granted their license no later than six months from the time of submission.
- Students will demonstrate understanding of Pharmacy Technology comprehensive knowledge and skills required for PTCE course preparation material.

Description

Intended for students in the Pharmacy Technician Program or for students who have completed an ASHP accredited Pharmacy Technician Program. Course provides application requirements for the Pharmacy Technician Certification Exam (PTCE) and Pharmacy Technician license in the State of California. Comprehensive review of pharmacy technician technical and didactic competencies to prepare students for the Pharmacy Technician Certification Exam (PTCE). Also includes several mock practice Pharmacy Technician Certification Exams. Enrollment is limited to students accepted in the program.

Course Objectives

The student will be able to:

A. Demonstrate understanding of content knowledge with pharmacology for technicians.
B. Demonstrate understanding of content knowledge with pharmacy law and regulations.
C. Demonstrate understanding of content knowledge with sterile and non-sterile compounding.
D. Demonstrate understanding of content knowledge with medication safety.
E. Demonstrate understanding of content knowledge with pharmacy quality assurance.
F. Demonstrate understanding of content knowledge with medication order entry and fill process.
G. Demonstrate understanding of content knowledge with pharmacy inventory management.
H. Demonstrate understanding of content knowledge with pharmacy billing and reimbursement.
I. Demonstrate understanding of content knowledge with pharmacy information system usage and application.
J. Take mock written examinations within satisfactory guidelines for state and national certification requirements.
K. Complete the California Pharmacy Technician State License Application.
L. Complete the PTCE registration and schedule to take PTCE.

Course Content

A. Pharmacology for technicians
1. Generic and brand names of pharmaceuticals
2. Therapeutic equivalence
3. Drug interactions (e.g., drug-disease, drug-drug, drug-dietary supplement, drug-OTC, drug-laboratory, drug-nutrient)
4. Strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy
5. Common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications
6. Dosage and indication of legend, OTC medications, herbal and dietary supplements
B. Pharmacy law and regulations
1. Storage, handling, and disposal of hazardous substances and wastes (e.g., MSDS)
2. Hazardous substances exposure, prevention and treatment (e.g., eyewash, spill kit, MSDS)
3. Controlled substance transfer regulations (DEA)
4. Controlled substance documentation requirements for receiving, ordering, returning, loss/theft, destruction (DEA)
5. Formula to verify the validity of a prescriber's DEA number (DEA)
6. Record keeping, documentation, and record retention (e.g., length of time prescriptions are maintained on file)
7. Restricted drug programs and related prescription-processing requirements (e.g.,thalidomide, isotretinoin, clozapine)
8. Professional standards related to data integrity, security, and confidentiality (e.g., HIPAA, backing up and archiving)
9. Requirement for consultation (e.g., OBRA'90)
10. FDA's recall classification
11. Infection control standards (e.g., laminar air flow, clean room, hand washing, cleaning counting trays, countertop, and equipment) (OSHA, USP 795 and 797)
12. Record keeping for repackaged and recalled products and supplies (TJC, BOP)
13. Professional standards regarding the roles and responsibilities of pharmacists, pharmacy technicians, and other pharmacy employees (TJC, BOP)
14. Reconciliation between state and federal laws and regulations
15. Facility, equipment, and supply requirements (e.g., space requirements, prescription file, storage, cleanliness, reference materials) (TJC, USP, BOP)
C. Sterile and non-sterile compounding
1. Infection control (e.g., hand washing, PPE)
2. Handling and disposal requirements (e.g., receptacles, waste streams)
3. Documentation (e.g., batch preparation, compounding record)
4. Determine product stability (e.g., beyond use dating, signs of incompatibility)
5. Selection and use of equipment and supplies
6. Sterile compounding processes
7. Non-sterile compounding processes
D. Medication safety
1. Error prevention strategies for data entry (e.g., prescription or medication order to correct patient)

2. Patient package insert and medication guide requirements (e.g., special directions and precautions)

3. Identify issues that require pharmacist intervention (e.g., DUR, ADE, OTC recommendation, therapeutic substitution, misuse, missed dose)

4. Look-alike/sound-alike medications

5. High-alert/risk medications

6. Common safety strategies (e.g., tall man lettering, separating inventory, leading and trailing zeros, limit use of error prone abbreviations)

E. Pharmacy quality assurance

1. Quality assurance practices for medication and inventory control systems (e.g., matching National Drug Code (NDC) number, bar code, data entry)

2. Infection control procedures and documentation (e.g., personal protective equipment [PPE], needle recapping)

3. Risk management guidelines and regulations (e.g., error prevention strategies)

4. Communication channels necessary to ensure appropriate follow-up and problem resolution (e.g., product recalls, shortages)

5. Productivity, efficiency, and customer satisfaction measures

F. Medication order entry and fill process

1. Order entry process

2. Intake, interpretation, and data entry

3. Calculate doses required

4. Fill process (e.g., select appropriate product, apply special handling requirements, measure, and prepare product for final check)

5. Labeling requirements (e.g., auxiliary and warning labels, expiration date, patient specific information)

6. Packaging requirements (e.g., type of bags, syringes, glass, PVC, child resistant, light resistant)

7. Dispensing process (e.g., validation, documentation and distribution)

G. Pharmacy inventory management

1. Function and application of NDC, lot numbers and expiration dates

2. Formulary or approved/preferred product list

3. Ordering and receiving processes (e.g., maintain par levels, rotate stock)

4. Storage requirements (e.g., refrigeration, freezer, warmer)

5. Removal (e.g., recalls, returns, outdates, reverse distribution)

H. Pharmacy billing and reimbursement

1. Reimbursement policies and plans (e.g., HMOs, PPO, CMS, private plans)

2. Third party resolution (e.g., prior authorization, rejected claims, plan limitations)

3. Third-party reimbursement systems (e.g., PBM, medication assistance programs, coupons, self-pay)

4. Healthcare reimbursement systems (e.g., home health, long-term care, home infusion)

5. Coordination of benefits

I. Pharmacy information system usage and application

1. Pharmacy-related computer applications for documenting the dispensing of prescriptions or medication orders (e.g., maintaining the electronic medical record, patient adherence, risk factors, alcohol drug use, drug allergies, side effects)

2. Databases, pharmacy computer applications, and documentation management (e.g., user access, drug database, interface, inventory report, usage reports, override reports, diversion reports)

J. Complete four online Pharmacy Technician Certification Exams

1. Identify areas of weakness from performance on the practice/mock Pharmacy Technician Certification Exams

2. Devise study plan to improve areas of weakness

K. Complete the California Pharmacy Technician State License Application

1. California Board of Pharmacy website to complete necessary documents

L. Complete the PTCE registration to take PTCE

1. Pharmacy Technician Certification Board website to complete necessary documents to sit for exam

2. Schedule exam

3. Take exam

Lab Content

Not applicable.

Special Facilities and/or Equipment

Computer and internet access to online learning system.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Quizzes/unit exams
PTCE mock exams: pre-test; four individual post-tests
Self-evaluation paper to identify areas of weakness
Lecture assignments
Homework assignments

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture presentations
Classroom discussion
Online learning/testing system

Representative Text(s) and Other Materials

Greenwald, Mark. Pharmacy Trainer: Pharmacy Technician Certification Review, 4th ed.. 2020.

California State Board of Pharmacy. Pharmacy Law with Rules and Regulations: California Edition. 2019.

California State Board of Pharmacy. Application Instructions for Pharmacy Technician License. 2019.

California State Board of Pharmacy website: www.pharmacy.ca.gov
Pharmacy Technician Certification Board website: www.ptcb.org

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Review all chapters in textbook as related to PTCE written exam.
B. Complete California Pharmacy Technician State Licensure Application packet.

Discipline(s)

Pharmacy Technology