

Institutional Pharmacy Practice (PHRA 1349)



Credit: 3 semester credit hours (2 hours lecture, 2 hours lab)

Prerequisite: Complete the TSI Assessment Tests

Course Description

Exploration of the unique role and practice of pharmacy technicians in an institutional pharmacy with emphasis on daily pharmacy operation. Topics include hospital pharmacy organization, work flow and personnel, medical and pharmaceutical terminology, safety techniques, data entry, packaging and labeling operations, extemporaneous compounding, inpatient drug distribution systems, unit dose cart fills, quality assurance, drug storage, and inventory control.

Required Textbook and Materials

1. Hospital Pharmacy Practice for Technicians
Authors: Mark Burton
ISBN: 978-1-284-03046-4

Course Objectives

Upon completion of this course, the student will be able to:

1. Identify the organization and communication across the multi-disciplinary health care-team.
2. Utilize pharmacy reference materials, medical and pharmaceutical terminology in the interpretation of medication orders.
3. Relate the importance of environmental, pharmacy, and personal safety standards to workplace behaviors in the institutional setting.
4. Demonstrate the procedures and work flow operations relating to processing medication orders, and preparing medications in an institutional setting to include mechanical, automatic and robotic drug delivery systems.

Course Outline

- I. Introduction
 - A. Health System and Pharmacy Technician Overview
 1. Introduction
 2. Origin
 3. Evolution
 4. Current Roles
 5. Future
- II. Professionalism in the Health System Pharmacy
 - A. Appearance and Attitude
 1. Appearance
 2. Attitude
 3. Mindset
 - B. Behaviors and Practices
 1. Punctuality
 2. Accountability

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- 3. Ethics
 - 4. Critical Thinking
 - C. Interactions and Decorum
 - 1. Communication
 - 2. Hospital Personnel
 - 3. Chain of Command
 - 4. Stressful Situations
- III. The Pharmacy Team: Functions and Duties
 - A. Central Technician
 - 1. Telephone Calls
 - 2. Face-to-Face Interactions
 - 3. Medication Filling
 - 4. Crash Carts
 - 5. Anesthesia Trays
 - B. IV Room Technician
 - 1. Overview
 - 2. Pre-preparation Concepts and Procedures
 - 3. Preparation Concepts and Procedures
 - 4. Post preparation Procedures
 - 5. Non-preparation Procedures
 - C. Automation Technician
 - 1. Medication Dispensing Overview
 - 2. Primary Technician ADC Activities
 - 3. Secondary Technician Activities
 - D. Specialty Roles and Duties
 - 1. Purchasing Agent
 - 2. Satellite Technician
 - 3. Controlled Substance Technician
 - 4. Technician Supervisor
 - 5. Automation Manager
 - 6. Medication Reconciliation Technician
 - E. Medication Safety
 - 1. Organizations
 - 2. Definitions
 - 3. Importance and Relevance
 - 4. Error Categories
 - 5. Error Causes
 - 6. Methods of Prevention
- IV. Informatics and Technology
 - A. Health System Software and Equipment
 - 1. ADT Systems

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2. Nursing Equipment and Software
 3. Physician Equipment and Software
 4. Fully Integrated Systems
 5. Troubleshooting
 - B. Pharmacy Management Software and Peripherals
 1. Functionality
 2. Technician Operations
 3. Order Scanning Software and Equipment
 - C. Automation Software and Peripherals
 1. Main Console
 2. Connectivity
 3. Overrides
 4. Handheld Scanner Devices and Applications
 - D. Repacking Technology
 1. Pill and Capsule Repackaging
 2. Oral Liquid Repackaging
 - E. IV Room Technology
 1. Horizontal Laminar Airflow Workbenches
 2. Barrier Isolators
 3. Biological Safety Cabinets
 4. Compounding Devices
 5. Maintenance and Quality Control
- V. Get Set for Your Career
 - A. Credentials
 1. Licenses, Registrations, and Certifications
 2. Renewals and Continuing Education
 3. Professional Organizations
 - B. Finding Employment
 1. Networking
 2. Applying for a Position
 3. Interviewing
 4. References

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Grade Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

1. 3 Unit Tests	60%
2. Comprehensive Final Exam	15%
3. Homework/Quizzes	10%
4. Semester Project	10%

Course Requirements

1. Quizzes and Homework
2. Exams and Final Exam
3. Class Participation

Course Policies

1. **No food, drinks, or use of tobacco products in class.** Lamar Institute of Technology policy prohibits food and drinks in the Multi-Purpose Building classrooms.
2. **Beepers, telephones, headphones, and any other electronic devices must be turned to vibrate, silent, or off while in class.** Inappropriate cell phone usage will result in confiscation of device. First offense is a verbal warning. The second offense is dismissal from class for the duration of the semester.
3. **Do not bring children to class.**
4. **No “make-up” or late assignments will be accepted. EXAMS INCLUDED. Students without proper documentation that miss a test will receive an automatic grade of “0”.**
5. **Attendance Policy**
 - a. Roll will be taken **DAILY**.
 - b. Students are expected to be on time and in their seat when roll is taken. **No** student without proper documentation will be allowed to enter the classroom after the scheduled time for class to begin.
6. **Class Absence.** It is the student’s responsibility to obtain missed lecture notes and class handouts. The instructor will not supply notes or handouts to students that are absent. Copies can be made at the Mary and John Gray Library.

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7. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
8. Academic dishonesty will not be tolerated and will result in automatic dismissal from the Pharmacy Technology Program.
9. Additional class policies as defined by the individual course instructor.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

Day	Topic	Assignment/Hwk
1/19	**Student Holiday**	
1/26	Chapters 1 & 2	Ch 1 & 2 Ch Rev
2/2	Chapters 3 & 4	Ch 3 & 4 Ch Rev
2/9	Chapters 5 & 6	Ch 5 & 6 Ch Rev
2/16	Exam #1 (Chapters 1-6)	
2/23	Chapter 7 & 8	Ch 7 & 8 Ch Rev
3/2	Chapters 9 & 10	Ch 9&10 Ch Rev
3/9	Chapters 11 & 12	Ch 11&12 Rev
3/16	Exam #2 (Chapters 7-12)	
3/23	***Spring Break***	
3/30	Chapters 13 & 14	Ch 13&14 Rev
4/6	Chapters 15 & 16	Ch 15&16 Rev
4/13	Exam #3 (Chapters 13-16)	
4/20	Presentations	
4/27	Presentations	
5/2	Final Exam Review	
5/11-14	Final Exam TBA	

Contact Information:

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