

PHM 112
PHARMACY PRACTICE II

COURSE DESCRIPTION:

Prerequisites: PHM 110, PHM 111, and PHM 115

Corequisites: English 111

This course provides continued instruction in the technical procedures for preparing and dispensing drugs in the hospital setting under a pharmacist's supervision. Topics include more detailed coverage of unit-dose dispensing, ward stock systems, materials management, automated dispensing, and quality assurance. Upon completion, students should be able to perform all technical aspects of hospital drug delivery systems. Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

COURSE OBJECTIVES:

Upon completion of this course, the student will demonstrate basic cognitive and practical knowledge and skills in each of the following:

- a. Organization of hospitals
- b. Organization and services of hospital pharmacy departments
- c. Hospital formulary service
- d. Materials management concepts
- e. Packaging and labeling guidelines
- f. Quality assurance principles
- g. Theory and practice in issuing ward/floor stock
- h. Computer technology applications in hospital pharmacy
- i. Theory and practice in unit-dose dispensing
- j. Theory and practice in controlled substances procedures
- k. Automated dispensing systems
- l. Medication errors
- m. Drug administration issues
- n. Infection control
- o. Policy and Procedure manual
- p. Long-term care facilities

OUTLINE OF INSTRUCTION:

- I. Course outline and objectives
- II. Organization of hospitals
 - A. Overview of hospital management
 - B. Overview of hospital departments
 - C. Classifications of hospitals
 - D. Services offered by hospitals

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- E. Organization and services of hospital pharmacy departments
- III. Hospital formulary service
- A. Role of the P & T Committee
 - B. Information found in formulary service entries
 - C. Formulary medications commonly used
 - D. Establish mock formulary in pharmacy lab
 - E. Process for additions and deletions
- IV. Materials management concepts and practice
- A. Factors influencing drug procurement
 - B. Generating a purchase order for controlled substances
 - C. Methods of inventory management
 - D. Ordering using the minimum/maximum levels
 - E. Receiving and unpacking an order
 - F. Documentation of the received order
 - G. Stocking shelves using stock rotation
 - H. Consideration of proper drug storage
 - I. Maintaining active and back-up stock in clean and orderly manner
 - J. Computerized drug inventory exercises
- V. Packaging and labeling guidelines
- A. Containers and closures used in packaging
 - B. Unit-dose liquid repackaging exercises
 - C. Recordkeeping guidelines necessary with bulk repackaging and extemporaneous packaging
 - D. Labeling requirements in the hospital setting
- VI. Quality assurance principles
- A. Quality assurance in unit-dose dispensing
 - B. Maintaining quality assurance with ward stock systems
 - C. Quality assurance issues with materials management
- VII. Ward stock systems
- A. Examples of floor/ward stock
 - B. Examples of floor/ward stock requisition sheets and slips
 - C. Charge and replace exercises
 - D. Issuing controlled substances as floor/ward stock
 - E. Filling and checking emergency cart stock
 - F. Charging and crediting patient accounts
- VIII. Computer technology applications in hospital pharmacy
- A. Computerized order entry
 - B. Barcode technology applications
 - C. Computerized physician order entry (CPOE)
 - D. Generating medication profile records and patient fill lists
 - E. Processing billing adjustments for patients' medications

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- F. Purchasing and inventory applications

- IX. Expanded theory and practice of unit-dose dispensing
 - A. Advantages of unit-dose drug distribution
 - B. Receipt and interpretation of medication orders
 - C. Maintaining patients' profile records
 - D. Utilizing fill lists
 - E. Filling unit-dose carts for RPh to check
 - F. Delivering and exchanging carts with nursing personnel
 - G. Updating orders after cart exchange
 - H. Processing first-fill orders
 - I. Purpose of MAR (Medication Administration Records)

- X. Theory and practice in controlled substances procedures
 - A. Receiving a controlled substance requisition sheet
 - B. Checking accuracy of record-of-use sheets
 - C. Handling a discrepancy report
 - D. Maintaining perpetual inventory
 - E. RPh checking of controlled substances to be issued
 - F. Delivering controlled substances to nursing unit
 - G. Obtaining RN signature for controlled substance receipt
 - H. Ordering controlled substances
 - I. Wasting and disposing of controlled substances
 - J. Impact of computer technology/automation

- XI. Automated dispensing systems
 - A. Utilization of automated pump to fill oral liquid medications
 - B. Utilization of automated dispensing cabinets for drug distribution
 - C. Hospital pharmacy tours for demonstration of automated dispensing systems

- XII. Medication errors
 - A. Examples of medication errors
 - B. Why medication errors may occur
 - C. List of confused drug names
 - D. Prevention of medication errors
 - E. High-alert medications

- XIII. Drug administration issues
 - A. Routes of administration for medications
 - B. Standard times of administration
 - C. Automatic stop orders

- XIV. Infection control
 - A. Goals of infection control
 - B. Routes of transmission
 - C. Common pathogens
 - D. Universal precautions

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- E. Hygiene
- XV. Policy and Procedure manual
 - A. Purpose
 - B. Organization
 - C. Content
 - D. Uses
- XVI. Long-term care facilities
 - A. Levels of care
 - B. Pharmacy services
 - C. Medication considerations

REQUIRED TEXTBOOKS AND MATERIALS:

Manual for Pharmacy Technicians. American Society of Health-System Pharmacists. (3rd ed.). 2005.

SUGGESTED REFERENCES, PERIODICALS, AND VISUAL AIDS:

These are available in the Educational Resources Center Library and the Pharmacy Laboratory.

STATEMENT OF STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability should request assistance from the Disability Services Coordinator within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to the Disability Services Coordinator within the first two weeks of class. The Coordinator can be contacted by calling 686-3652, (V/TT), or by visiting the Student Services Office, Room 23, of the White Building.