

**San Bernardino Valley College**  
**Course Outline for PHT 041**  
**PHARMACY SYSTEMS**

**I. CATALOG DESCRIPTION**

PHT 041 Pharmacy Systems

2 hours lecture; 3 hours of lab = 3 units

This course focuses on the application of advanced distribution and dispensing methods for medications within a laboratory setting. Emphasizes advanced concepts of inventory control and repackaging systems.

Prerequisites: PHT 030 and PHT 031

**II. NUMBER OF TIME COURSE MAY BE TAKEN FOR CREDIT: One**

**III EXPECTED OUTCOMES FOR STUDENTS**

Upon completion of the course the student should be able to:

- A. Repackage and label unit doses from a bulk supply of drugs and correctly complete all necessary control records.
- B. Read and interpret prescriptions, select correct drug, select appropriate container, type correct label.
- C. Prepare Intravenous Admixtures, using sterile technic and appropriate labeling.
- D. Explain safety precautions and identify types of drugs requiring special handling.
- E. Describe the procedure for handling of investigation and study drugs.
- F. Explain the required procedure for ordering, receiving and the storage of drugs.
- G. Demonstrate the ability to use control records for medications requiring special handling.
- H. Demonstrate the ability to maintain an inventory control system.
- I. Demonstrate the ability to use a computer for pharmacy operations.

**IV. CONTENT**

- A. Purchasing and Inventory Control
  - 1. Receiving and storing pharmaceuticals
  - 2. Maintaining and managing inventory
  - 3. Products requiring special handling and safety precautions
  - 4. Repackaged pharmaceuticals
- B. Distribution Systems
  - 1. Unit dose delivery system
  - 2. Preparation of prescriptions
  - 3. Prevention of errors
  - 4. Record keeping
- C. Non-Sterile Compounding
  - 1. Equipment
  - 2. Common compounded products
- D. Sterile Compounding
  - 1. Aseptic technic
  - 2. Intravenous admixtures
  - 3. Parenteral Nutrition
- E. Pharmacy Operations

1. Computerized operations
2. Inventory control
3. Pricing
4. Patient profiles

**V. METHODS OF INSTRUCTION**

1. Lecture
2. Demonstration
3. Return demonstration by students
4. Simulated exercises

**VI TYPICAL ASSIGNMENTS**

1. Prepare five intravenous admixtures using sterile technic.
2. Demonstrate the removal of medications from Vials and Ampules
3. Prepare a report listing drugs requiring special handling including specific procedures to be followed in each case.

**VII. EVALUATION**

- A. Methods of evaluation
  1. Mastery of skills
  2. Examinations
  3. Quizzes
  4. Written report
  5. Final Examination
- B. Frequency of evaluation
  1. Immediate feedback on performance of skills
  2. Four examinations
  3. One report
  4. Final Examination

**VIII. TYPICAL TEXT**

Buchanan, E. Clyde et.al. Principles of Sterile Product Preparation. Bethesda, Maryland: American Society of Health-System Pharmacist, 1995.

ASHSP. Manual for Pharmacy Technicians. Bethesda, Maryland: American Society of Health-System Pharmacist, 1998.

**IX OTHER SUPPLIES REQUIRED: None**