PHM 138
PHARMACY CLINICAL

COURSE DESCRIPTION:

Prerequisites: Enrollment in the Pharmacy Technology program, ENG 111, PHM 118, PHM 120, and PHM 165

Corequisites: PHM 125, PHM 140, and COM 120

This course provides an opportunity to work in pharmacy settings under a pharmacist’s supervision. Emphasis is on communicating effectively with personnel, developing proper employee attitude, and dispensing medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and operate computers efficiently. Course Hours Per Week: Clinical, 24. Semester Hours Credit: 8.

LEARNING OUTCOMES:

Upon completion of this course, the student will demonstrate basic cognitive and psychomotor competencies in each of the following pharmacy areas:

a. Hospital and pharmacy organization
b. Outpatient dispensing
c. Inpatient dispensing
d. Unit-dose systems
e. Purchasing and inventory control
f. Controlled drug systems
g. Aseptic technique and laminar flow hood usage
h. Intravenous admixture systems
i. Compounding and sterile production
j. Chemotherapy systems and dispensing
k. Special preparation equipment
l. Non-sterile compounding
m. Automated dispensing systems

OUTLINE OF INSTRUCTION:

I. Clinical orientation
   A. Rotations
   B. Policies
   C. Evaluation
II. Hospital pharmacy organizations
   A. Centralized pharmacy organizations
   B. Satellite systems
   C. Management and levels of supervision

III. Outpatient dispensing
   A. Receipt and computer entry of prescription
   B. Filling of prescription
   C. Filling controlled drug prescriptions
   D. Filling third-party prescriptions and record keeping
   E. Pricing and filing prescriptions
   F. Maintaining patient or family medications record systems
   G. Automated dispensing systems

IV. Inpatient dispensing
   A. Ward stock
   B. Cart exchange
   C. Pick-up and delivery
   D. Individual prescription system
   E. Controlled drugs
   F. Stock locations
   G. Labeling
   H. Automated dispensing systems

V. Unit-dose systems
   A. Patient admitting
   B. Medication orders and dispensing records
   C. Medication carts
   D. Filling records
   E. Automatic stop orders
   F. Controlled drugs
   G. Automated dispensing systems
   H. Patient discharges and transfers
   I. Technician versus pharmacist responsibilities

VI. Purchasing and inventory control
   A. Procedures and records
   B. Storage and stock rotation
   C. Receiving
   D. Purchasing and ordering

VII. Basic techniques
   A. Aseptic technique
   B. Use and maintenance of laminar flow hoods
   C. Sterilization/disinfection
VIII. Intravenous and admixture systems
   A. Compliance with USP 797
   B. Flow of order and computer entry
   C. Labeling
   D. IV admixture stocks and solutions
   E. Preparation of small volume parenterals
   F. Preparation of large volume parenterals
   G. Preparation of total parenteral nutrition solutions
   H. Delivery and storage of completed admixtures
   I. Use of automated compounding equipment
   J. Infusion control devices
   K. Quality assurance

IX. Other sterile production and compounding
   A. Record keeping and procedures
   B. Equipment maintenance and operation
   C. Preparation of prefilled syringes
   D. Preparation of dialysis and/or irrigation solutions
   E. Specialty products
   F. Use of special preparation equipment
   G. Quality assurance

X. Chemotherapy systems
   A. Order flow and entry
   B. Labeling and record keeping
   C. Vertical flow hood and aseptic technique
   D. Hazardous chemical safety and procedures
   E. Disposal of cytotoxic agents

XI. Non-sterile compounding
   A. Equipment
   B. Preparation of products
   C. Packaging, labeling, and record keeping
   D. Product stability

REQUIRED TEXTBOOKS AND MATERIALS:

Textbooks: None

Materials: Pharmacy Technology Student Policy Manual. Professional jacket and ID badge as designated by the program director are required.
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SUGGESTED REFERENCES, PERIODICALS, AND VISUAL AIDS:

None.

Refer to Standard Operating Procedures or Policy Procedure Manuals for the various affiliating pharmacies.

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor 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 a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 919-536-7207, ext. 1413 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1209.