#### PHARM 157 Course Outline as of Spring 2007

## **CATALOG INFORMATION**

Dept and Nbr: PHARM 157 Title: HOSPITAL PHARM PRACTICE

Full Title: Hospital Pharmacy Practice for the Pharmacy Technician

Last Reviewed: 9/11/2023

Units		Course Hours per Week	ľ	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	0.50	Lecture Scheduled	1.00	8	Lecture Scheduled	8.00
Minimum	0.50	Lab Scheduled	1.50	8	Lab Scheduled	12.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.50		Contact Total	20.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 16.00 Total Student Learning Hours: 36.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

#### **Catalog Description:**

This course is designed to prepare the Pharmacy Technician for employment in an inpatient hospital setting including employment as a fill technician and/or IV compounding technician.

## **Prerequisites/Corequisites:**

Completion of PHARM 151, PHARM 152, PHARM 153, and PHARM 154A.

## **Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: This course is designed to prepare the Pharmacy Technician for employment in an inpatient hospital setting including as a fill technician and/or IV compounding technician. (Grade Only)

Prerequisites/Corequisites: Completion of PHARM 151, PHARM 152, PHARM 153, and

PHARM 154A.

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

**Transfer Credit:** 

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## Certificate/Major Applicable:

Certificate Applicable Course

#### **COURSE CONTENT**

# **Outcomes and Objectives:**

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

- 1. Recognize the differences between retail pharmacy and hospital pharmacy and the skills required for working in a hospital inpatient setting.
- 2. Acquire the ability to communicate effectively with professional and ancillary staff in the hospital setting.
- 3. Compare and contrast the unique medication delivery systems found in hospital and inpatient environments and implement them efficiently and effectively.
- 4. Integrate physician orders, fill lists, and complete medication administration records in order to fulfill patients medication needs on a daily basis.
- 5. Differentiate between medications and medication dosage forms, and demonstrate the ability to compound medications accurately and safely.
- 6. Function as an effective member of the medication delivery team in an inpatient setting.

## **Topics and Scope:**

- 1. Introduction to the hospital environment
  - A. Professional staffing and personnel policies
  - B. Formularies
  - C. Standard operation procedures
    - 1. Joint Commission on Accreditation of Healthcare Organizations
    - 2. Pharmacy & Therapeutics Committee
  - D. Purchasing, Central supply
  - E. Reading medication orders and terminology used on hospital orders
- 2. Hospital medication delivery systems and vocabulary

- A. Physician's order
- B. Medication administration record, fill lists, unit dose, automated drug delivery systems.
- C. Floor stock
  - 1. Medication carts
  - 2. Crash carts
- D. Urgent (Stat) orders vs. standing orders
- E. Inventory control
- F. Transfer medications
- G. Recapture of unused medications
- H. Billing
- 3. Needles and Syringes
  - A. Small and large volume parenterals
  - B. Vials, ampules
  - C. Intravenous (IV) administration sets
    - 1. Filter needles
    - 2. Flow rates
    - 3. Aseptic technique of IV medication
    - 4. Sterile preparation of IV medication
  - D. Gowning and gloving
  - E. High Efficiency Particulate Air filters
  - F. Biological safety cabinet: working in the laminar and Vertical flow hoods
- 4. IV solution/medication compatibility
  - A. Choosing the correct tools to prepare IV solutions
  - B. Labeling IV preparations
    - 1. Inpatient use
    - 2. Outpatient use
  - C. Calculating
    - 1. Flow rates
    - 2. Powder volume
    - 3. Expiration dates
- 5. Preparing total parenteral nutrition (TPN)
  - A. Gravity method vs. auto-mix compounding
  - B. Preparing TPN admixture report
  - C. Creating a medication pool
- 6. Single dose and Multi-dose vials
  - A. Preparation and storage
  - B. Working with ampules
  - C. Reconstituting powders
- 7. Chemotherapy agents
  - A. Safety issues
  - B. Use of Chemo Spill Kit
  - C. Safety equipment
  - D. Correct selection of equipment
  - E. Labeling and packaging of chemotherapy preparations
  - F. Disposal of biohazard materials

## **Assignment:**

- 1. Reading assignments in the textbook, 10-20 pages per week.
- 2. Homework: create labels for practice medications to be used

in the lab portion of the class.

- 3. Laboratory skill demonstrations: Techniques and manipulation skills for hospital devices and medications; preparation of work area.
- 4. Laboratory problem solving: Dosage calculations; correct preparation of medications.
- 5. Weekly quizzes on terminology; 2 exams; final examination.

#### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing 0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Lab problem solving.

Problem solving 45 - 50%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Laboratory skill demonstrations; labels.

Skill Demonstrations 5 - 10%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion, Essay Questions

Exams 45 - 50%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category 0 - 0%

# Representative Textbooks and Materials:

Johnston, Mike. Sterile Products: The Pharmacy Technician Series. Prentice Hall PTR, 2005.