

**Bossier Parish Community College**  
**Master Syllabus**

**Course Prefix and Number:** PHAR 110L

**Credit Hours:** 1

**Course Title:** Sterile Products

**Course Prerequisite:** Phar 101, Phar 102, Phar 102L, Phar 104

**Course Co-requisite:** Phar 120, Phar 110

**Textbooks:** Johnston, Mike; The Pharmacy Technician Series: Sterile Products,  
2<sup>nd</sup> edition

**Course Description:**

This course provides activities or laboratory exercises to support PHAR 110 lecture.

**Learning Outcomes:**

- A. Demonstrate problem solving skills (1.8)
- B. Perform mathematical calculations essential to the duties of the pharmacy technician in a variety of settings. (2.6)
- C. Practice and adhere to effective infection control procedures (2.8)
- D. Assist the pharmacist in preparing, storing and distributing medication products requiring special handling and documentation (3.6)
- E. Use information from Safety Data Sheets (SDS), National Institute of Occupational Safety and Health (NIOSH) Hazardous Drug List, and the United States Pharmacopeia (USP) to identify, handle, dispense, and safely dispose of hazardous medications and materials. (3.9)
- F. Use current technology to ensure the safety and accuracy of medication dispensing. (3.13)
- G. Prepare simple non-sterile medications per applicable USP chapters. (3.16)
- H. Prepare compounded sterile preparations per applicable, current USP Chapters (3.23)
- I. Prepare or simulate chemotherapy/hazardous drug preparations per applicable, current USP chapters. (3.25)
- J. Apply patient and medication safety practices in aspects of the pharmacy technician's role (4.2)
- K. Describe OSHA requirements for prevention and response to blood-borne pathogen exposure (e.g. accidental needle stick, post-exposure prophylaxis). (5.7)
- L. Participate in pharmacy compliance with professional standards and relevant legal, regulatory, formulary, contractual, and safety requirements. (5.9)

To achieve the learning outcomes, the student will complete the following labs and activities to achieve the identified objectives:

**Lab 1: Personal Aseptic Technique**

1. Demonstrate proper handwashing technique. (C)
2. Demonstrate the proper technique for garbing for sterile products preparation. (C)

**Lab 2: ASHP's Assessment Guide to Chapter <797>**

1. Demonstrate a basic understanding of USP 797 and USP 800 (H)(D)(L)

**Lab 3: Cleaning the Vertical Laminar Flow Hood**

1. Demonstrate the proper technique for cleaning of the vertical laminar flow hood (J)

**Lab 4: Introduction to Aseptic Manipulations**

1. Describe OSHA requirements for prevention and response to blood borne pathogen exposure. (K)
2. Demonstrate the straight draw technique for injecting an IV bag. (H)
3. Demonstrate the correct technique for reconstituting of a powder vial. (H)
4. Demonstrate the proper technique for an ampule draw. (H)
5. Demonstrate the proper technique for aseptically transferring drugs from a vial. (H)

**Lab 5: Microbiological Contamination of an IV**

1. Perform a culture test on an IV solution to determine microbial contamination (C)

**Lab 6: Application of Sterile Technique in Preparation of Sterile Products**

1. Demonstrate proper technique to draw liquid from an ampule. (H)
2. Demonstrate proper technique to reconstitute a powder vial. (H)

**Lab 7: Repeater Pump**

1. Demonstrate the proper use of a repeater pump (F)
2. Utilize the repeater pump to fill syringes and Elastomeric Pumps for home infusion. (H)

**Lab 8: TPN**

1. Demonstrate the ability to utilize a compounder to produce a TPN (F)
2. Utilize a Baxa compounder to add Macro, base fluids and micronutrients to a TPN bag (H)
3. Correctly perform TPN calculations (B)

**Lab 9: ISOTECH Positive Pressure Barrier Isolator Hood**

1. Demonstrate the ability to operate and maintain a positive pressure barrier hood. (F)
2. Perform a manipulation inside an isolator hood. (F)

**Lab 10: Safe Handling of Hazardous Drugs**

1. Describe the procedures and precautions necessary for the safe handling of Hazardous drugs (F) (D) (I) (K)

**Lab 11: Simple Non-sterile Medications**

1. Demonstrate the ability to prepare simple non-sterile medications (G)

**Lab 12: Utilizing Reference Materials to Safely Handle Hazardous Materials**

1. Demonstrate the ability to use information from Safety Data Sheets (SDS), the NIOSH Hazardous Drug List, and the United States Pharmacopeia (USP) to gather information on the identification, handling, dispensing, and safe disposal of hazardous medications and materials. (E)

**Case study: Identifying Errors in Aseptic Technique**

1. Utilize critical thinking to correctly analyze a case study and identify errors in aseptic technique (A)

**Sterile Products Modules**

1. Demonstrate an understanding of the major concepts of sterile preparation concepts. (L)

**Mathematics for Pharmacy Practice**

1. Demonstrate the ability to perform mathematical calculations necessary for the accurate preparation of sterile products (B)

**Course Requirements:** To earn a grade of “C” or higher the student must earn 70% of the total points for the course and meet all of the following course requirements.

- minimum 70% on the comprehensive written final exam
- minimum average of 70% in laboratory
- on the laboratory practical exam demonstrate competency on all identified skills as documented on checklist with a maximum of one instructor correction
- minimum of 70% on learning assessments for the national sterile products certification modules

**Course Grading Scale**

- A- 90% or more of total possible points and meet all course requirements
- B- 80% or more of total possible points and meet all course requirements
- C- 70% or more of total possible points and meet all course requirements
- D- 60% or more of total possible points and meet all course requirements
- F- less than 60% of total possible points or failure to any all of the course requirements.

**Attendance Policy:** The college attendance policy, which is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>, allows that “more restrictive attendance requirements may apply to some specialized classes such as laboratory, activity, and clinical courses because of the nature of those courses.”

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, certification exams and/or clinical fees.

## **Nondiscrimination Statement**

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### COORDINATOR FOR SECTION 504 AND ADA

Angie Cao, Student and Disability Services Specialist

Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111

318-678-6511

[acao@bpcc.edu](mailto:acao@bpcc.edu)

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

**For assistance with study skills or time management contact the SNAH Student Success Coordinator, Sandra Roberson (B- 145; 678-6148; [sroberson@bpcc.edu](mailto:sroberson@bpcc.edu))**

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