

Intravenous Admixture and Sterile Compounding (PHRA 1345 1A1)

CREDIT

3 semester credit hours (3 hours lecture and lab)

MODE OF INSTRUCTION

Online Lecture

Face to Face Lab



**LAMAR INSTITUTE
OF TECHNOLOGY**

PREREQUISITE/CO-REQUISITE:

Complete the TSI Assessment Tests with 343/Mathematics, 347/Reading, and 357/4/Writing

COURSE DESCRIPTION

A study of sterile products, legal and regulatory guidelines, hand washing techniques, pharmaceutical calculations, references, safety techniques, aseptic techniques in parenteral compounding, proper use of equipment, preparation of sterile products, and safe handling of antineoplastic drugs.

COURSE OBJECTIVES

- Upon completion of this course, the student will be able to:
- Employ the methods for learning that are best suited to individual learning needs.
- Identify the ethical and legal obligations of sterile compounding personnel, including training and assessment requirements, and the procedures for avoiding and reporting medication errors.
- Describe the pharmacy environment appropriate for sterile compounding as defined by USP Chapter <797>.
- Identify supply items used in sterile compounding, and describe appropriate technique to maintain the sterility of their critical sites.
- Translate pharmacy and medical terminology, abbreviations, and symbols that are used on the medication orders and CSP labels utilized in sterile compounding.
- Perform the calculations required for dosage determination and solution preparation.
- Demonstrate aseptic technique in garbing, hand washing, and hood cleaning utilizing technique defined in USP Chapter <797>.
- Perform sterile compounding procedures to prepare various vial-based or ampule-based large-volume and small-volume parenteral preparations.
- Prepare specialty admixtures such as narcotic preparations and pediatric CSPs.
- Display appropriate technique in the compounding of a TPN preparation.
- Identify the procedures for handling hazardous materials such as chemotherapy CSPs.
- Exhibit excellent aseptic technique during process validation and assessment of the sterile compounding procedures presented in the textbook.

Week	Assignment Name and Readings	Due Date	Assignment Location
1	Introduction, Syllabus; Orientation & Expectation	Wednesday, 01/17/2024	Handout
2	Chapter 1-Sterile Compounding as a Pharmacy Technician	Wednesday, 01/24/2023	Meet the challenge & Self-check Page 5-25
3	Chapter 2-The Sterile Compounding Environment	Wednesday, 01/31/2024	Figures 2.1, 2.2, 2.3 Page 27- 51
4	Chapter 3-Sterile Compounding Supplies	Wednesday, 02/07/2024	Self-Check & Figure 3.1 & 3.4 Page 53-83
5	Exam I Chapters 1-3	Wednesday, 02/14/2024	Blackboard
6	Chapter 4-Medication Orders and Labeling	Wednesday, 02/21/2024	Self-Check & Meet the Challenge Page 85-113
7	Chapter 6- Aseptic Garbing, Hand Washing, and Gloving	Wednesday, 02/28/2024	Garbing/ Self-Check/ Check the Basics Page 165-187
8	Exam II Chapters 4-6	Wednesday, 03/05/2023	Blackboard

9	SPRING BREAK	Wednesday, 03/11/- 03/13/24	ENJOY!
10	Chapter 7- Cleaning the Horizontal Laminar Airflow Hood	Wednesday, 03/20/2024	Self-Check & Check the Basics Page 189-209
11	Chapter 8-Large- Volume Parenteral Preparations	Wednesday, 03/27/2024	Self-Check & Check the Basics Page 211-249
12	Chapter 9-Small - Volume Parenteral Preparations	Wednesday, 04/03/2024	Self-Check & Check the Basics Page 251- 287
13	Exam III Chapters 7-9	Wednesday, 04/10/2024	Blackboard
14	Chapter 13-Total Parenteral Nutrition Chapter 14- Chemotherapy Products and Procedures	Wednesday, 04/17/2024	Self-Check & Check the Basics Page 393-495
15	EXAM IV- Chapter 13 & 14	Wednesday, 04/24/2024	Blackboard

16	Semester Project	Wednesday, 05/01/2023	Handout
17	Final Exam	Wednesday, 05/09/2023	Blackboard

INSTRUCTOR CONTACT INFORMATION

Instructor: **Dr. Coya A. Garrett DHA, M.Ed, BSW, LCDC-I, CPhT-I**

Email: cagarrett@lit.edu

Office Phone: **409-257-0060**

Office Location: **Gateway**

Office Hours: **Wednesdays 4:30 pm - 5:30 pm or by appointment**

REQUIRED TEXTBOOK AND MATERIALS

- **Sterile Compounding and Aseptic Technique: Concepts, Training, and Assessment for Pharmacy Technician- Text with Student Resources DVD (optional).**
ISBN 978-0-76384-083-9
- **Any other materials required will be discussed by the Instructor throughout the course.**

ATTENDANCE POLICY

Student “attendance” in online courses will be defined as active participation in the course as described in the individual course syllabus. Online courses will, at a minimum have weekly mechanisms for student participation, which can be documented by any or all of the following methods: student tracking records in Blackboard; submission/completion of assignments; and communication with the instructor. Students who fail to maintain active participation in an online course as defined in the course syllabus will be processed in accordance with the College’s current attendance policy.

Drop Policy

If you wish to drop a course, the student is responsible for initiating and dropping the course. If you stop logging-in to the course and do not complete the course drop process, then you will earn an “F” grade for the course.

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

1. Final Exam 35%
2. Exams 20%
3. Homework 20%
4. Lab 25 %

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty

members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

- Students must provide their own textbooks, writing instruments, and other necessary supplies for classes.
- Students must respect one another and all faculty.
- Internet Usage – Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions.
- No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result in expulsion from LIT.
- All exams will be taken on the scheduled dates. If a test is missed due to an emergency situation, the student will have one week to make it up; otherwise a grade of “0” will be assigned. The instructor **MUST** be contacted to receive prior approval to take the exam late.
- All assignments are due when stated with no exceptions unless proper documentation is provided.
- Students are expected to follow the Lamar Institute of Technology Code of Conduct and Disciplinary Policy.
- The instructor will respond to e-mail and voice mail communication within 24 hours Monday through Friday. Assignment grades will be published within 1 week.