



PHRA 1445-101CL

Intravenous Admixture and Sterile Compounding

Spring 2025

Tuesday, Thursday, 8:30am -11:00am

Instructor Information: Lisa Homburg, R. Ph., lhomburg@com.edu, 409-933-8685

Student hours and location: Monday-Thursday 1:15pm-3:15pm, or by appointment.
STEAM Building, Office 255-41

Required Textbook: *Sterile Compounding and Aseptic Technique, 2nd edition, by Lisa McCartney & Brenda Jensen* - ISBN 10: 0763878596 & ISBN 13: 9780-763878597 (COM Bookstore ISBN: 9798385122349)

Required Supplies: Cellphone, tablet, or other video recording device

Course Description: The course is a study of the process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines specified by USP <797> standards.

Course Requirements: Students are required to pre-read the chapters as indicated on the course outline and watch video demonstrations of nine sterile lab processes, practicing those lab processes, making and posting a recording of their personal process skills, constructively critiquing recordings of peers' skills, and then demonstrating each of the nine processes with $\geq 90\%$ compliance to the instructor. Students will be responsible for answering questions in quiz and exam assessments measuring their understanding and ability to apply course facts and concepts.

Four Quizzes covering multiple chapters.

Four Exams: a mid-term exam, a mid-term lab exam, a final exam, and final lab exam.

Mandatory Mid-Semester Meeting: All students are required to meet with the Pharmacy Technician Program Instructor at the mid-point of the semester. This is an opportunity to discuss the student's standing in each course, identify regulatory requirements which must be met, develop a student academic plan, and complete mandatory paperwork.

Video/Photo Posts, Personal and Peer Review for nine process validation competency assessments

Nine process validation competency assessments passed off with $\geq 90\%$ accuracy

Mandatory Nursing and Allied Health Simulation Day-April 9, 2025 8:00am-5:00pm

Determination of Course Grade/Detailed Grading Formula:

Course work will consist of chapter assignments/labs, 4 quizzes, 4 multiple choice and true-false exams, video posts and peer reviews, and 9 process validation competency assessments.

Activity	Percentage Weight
Chapter Exam Questions/ Exploratory Labs	20%
Video/Photo Posts, Personal and Peer Reviews	20%
Mid-Term Exams	20%
Final Exams	20%
Process Validation Competency Assessments	20%

Grading Scale:

Letter Grade	Numerical Point Value
A	90-100
B	80-89
C	70-79
D	65-69
F	64 and below

Late Work, Make-Up, and Extra-Credit Policy:

Late Work Policy: Late work will not be accepted.

Make-Up Policy: There is no make-up policy for this course. Students are expected to complete the course activities in a timely manner according to the required due dates. **The student is responsible for obtaining all missed materials and is responsible for meeting all upcoming due dates for assignments, quizzes, and exams, even if the student was absent when the assignment was given.** There will be **no make-up exams** given in any Pharmacy Technician Program courses unless prior arrangements have been made with the instructor in response to extenuating circumstances. If a student misses one exam during the semester in any course, they may use their final exam grade in place of the missed exam grade. If any other exams are missed in any course, a grade of "0" will be given.

Attendance Policy: Students at COM are expected to attend and participate in every session of all courses for which they are registered. College of the Mainland recognizes no excused absences other than those prescribed by law.

The student will receive an attendance grade based on attendance and ACTIVE participation.

If absent, the student is responsible for contacting a classmate to obtain any assignments or materials. The student is responsible for all missed materials and upcoming quizzes/assignments on the assigned due date even if the assignment was given on the day the student was absent.

Note: nonattendance may affect financial aid. If a student fails to meet the attendance requirements, he or she may be recommended for withdrawal from the course. In the case of an anticipated absence, such as military deployment, the student should contact the instructor in advance and make arrangements to complete the required assignments. In case of an emergency (illness/accident or death in family), a student should contact the instructor as soon as possible providing documentation supporting the need for any late submission of a graded event.

Tardiness Policy: Class will start at the stated time. Students who are not in attendance at the start of class are considered tardy. Three tardies will constitute an absence and will impact the student's attendance/participation grade.

Any student arriving to class more than 10 minutes late will not be allowed to take a scheduled exam and will receive a grade of zero.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

The preferred method of contact is **com.edu email**. You may reach me at lhomburg@com.edu. I will respond within 24 hours of receiving your email, Monday through Friday. Emails sent on Fridays may not receive a response until Monday. If you need an immediate response on weekends or evenings, you may use my personal email, lisahomburg@aol.com or text me.

Student Learner Outcomes:

Core Objectives: Students successfully completing this course will demonstrate competency in the following Core Objectives:

Student Learner Outcome	Map to Core Objectives	Assessed via this Assignment
1. Students will demonstrate procedures and techniques consistent with USP <797> standards	Personal Responsibility	Ampule-based Preparation: Process Validation Competency Assessment
2. Students will perform dosage calculations required for sterile product preparation	Empirical and Quantitative Skills	Chapter 5 Exploratory Lab
3. Students will demonstrate safe handling and preparation of compounded sterile preparations	Personal Responsibility	Hazardous Drug Preparation Process Validation Competency Assessment

Academic Dishonesty: Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty—such as cheating on exams, forging paperwork, or passing someone else’s work off as your own, is an extremely serious offense and will result in a grade of zero on that exam/assignment and a referral to the appropriate office for disciplinary action. It may result in failure of the course and expulsion from the program.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Kay Carrier, Department Chair at 409-933-8414, or kcarrier3@com.edu.

Notice to Students Regarding Licensing: Effective September 1, 2017, HB 1508 amends the Texas Occupations Code Section 53 that requires education providers to notify potential or enrolled students that a criminal history may make them ineligible for an occupational license upon program completion. The following website provides links to information about the licensing process and requirements: (<https://www.ptcb.org/get-certified/apply-for-cpht#.W34ziOhKjIU>, <https://www.pharmacy.texas.gov/> and https://www.pharmacy.texas.gov/files_pdf/Licensure%20QA.pdf).

Should you wish to request a review of the impact of criminal history on your potential Pharmacy Technician Certification and Texas State Board of Pharmacy Registration prior to or during your quest for a degree, you can visit this link and request a “Criminal History Evaluation”: (<https://www.ptcb.org/> and <https://www.pharmacy.texas.gov/>).

COM is providing this information to all persons who apply or enroll in the program, with notice of the requirements as described above, regardless of whether or not the person has been convicted of a criminal offense. Additionally, HB 1508 authorizes licensing agencies to require reimbursements when a student fails to receive the required notice.

Course Structure

This course will be delivered face-to-face with assignments/quizzes/exams delivered online through the course management system D2L Brightspace. You will use your COM account to log in to the course from the D2L Brightspace login page - <https://com.brightspace.com/>. If you have not activated your COM account, please visit <https://webadvisor.com.edu>.

In D2L Brightspace, you will access online lessons, course materials, and resources. At designated times throughout the semester, students will participate in activities which may consist of but not be limited to quizzes, exams, questions/assignments, chat, blogs, discussion forums, email, journaling, blogging, wikis, and web posting using D2L Brightspace and/or alternative Internet-based technologies.

To access this course on D2L Brightspace you will need access to the Internet and a supported Web browser (Chrome, Firefox, Safari). To ensure that you are using the recommended personal computer configurations, please refer to the course requirements section in this syllabus.

PHRA 1445 Course outline

Due Date	
Week 1 Jan 14	Syllabus and Outline Chapter 1 Introduction to Sterile Compounding Chapter 1 Exploratory- Exploring the CPE Monitor Due Jan 14, 2025 by 11:59pm Chapter 1 End of Chapter Questions Due Jan 14, 2025 by 11:59pm
Jan 16	Chapter 2 Medication Safety Chapter 2 Exploratory Lab Due Jan 16, 2025 by 11:59pm Chapter 2 End of Chapter Questions Due Jan 16, 2025 by 11:59pm
Week 2 Jan 21	Chapter 3-Law, Ethics, and Quality Assurance Chapter 3 Exploratory Lab Due Jan 21, 2025 by 11:59pm Chapter 3 End of Chapter Questions Due Jan 21, 2025 by 11:59pm
Jan 23	Chapter 4-The Sterile Compounding Environment
Week 3 Jan 28	Chapter 4-The Sterile Compounding Environment Chapter 4 Meet the Challenge Medication Order Activity Chapter 4 Exploratory Lab Due Jan 28, 2025 by 11:59pm Chapter 4 End of Chapter Questions Due Jan 28, 2025, 11:59pm QUIZ 1- Chapters 1-4 Due Jan 28, 2025, 11:59pm
Jan 30	Chapter 5 Sterile Compounding Supplies Chapter 5 Exploratory Lab Due Jan 30, 2025 by 11:59pm Chapter 5 End of Chapter Questions Due Jan 30, 2025 by 11:59pm
Week 4 Feb 4	Chapter 6 Medication Orders and Labeling Chapter 6 Exploratory Lab Due Feb 4, 2025 by 11:59pm Chapter 6 End of Chapter Questions Due Feb 4, 2025 by 11:59pm
Feb 6	Chapter 7 Calculations for Sterile Compounding Chapter 7 Exploratory Lab Due Feb 6, 2025 by 11:59pm Chapter 7 End of Chapter Questions Due Feb 6, 2025 by 11:59pm Register for National IV Certification through Austin Community College
Week 5 Feb 11	Chapter 8 Hand Hygiene and Garbing Procedural Lab Practice in Classroom–Video Process Discussion - Post Video and Personal Critique by 11:59pm Tuesday – Post Constructive Peer Reviews Due by 11:59pm Wednesday Pay for National IV Certification through Austin Community College
Feb 13	Process Validation Competency Assessment-Hand Hygiene and Garbing Chapter 8 End of Chapter Questions Due Feb 13, 2025 by 11:59pm
Week 6 Feb 18	Chapter 9 Cleaning the Horizontal Laminar Airflow Workbench Procedural Lab Practice in Classroom–Video Process Discussion- Post Video and Personal Critique by 11:59pm Tuesday-

Due Date	
	Post Constructive Peer Reviews Due by 11:59pm Wednesday.
Feb 20	Process Validation Competency Assessment-Cleaning the Horizontal Laminar Airflow Workbench Chapter 9 End of Chapter Questions Due Feb 20, 2025 by 11:59pm QUIZ 2 - Chapters 5-9 Due Feb 20, 2025, 11:59pm
Week 7 Feb 25	Mid-Term Exam (Chapters 1-9)
Feb 27	LAB Mid-Term Exam
Week 8 Mar 4	Chapter 10 Large Volumes Parenteral Preparations Procedural Lab Practice in Classroom–Videotape Process Discussion- Post video and Personal Critique by 11:59pm Tuesday- Post Constructive Peer Review by 11:59pm Wednesday.
Mar 6	Process Validation Competency Assessment: Large Volume Parenteral Preparations Chapter 10 End of Chapter Questions Due Mar 6 by 11:59pm
Week 9 Mar 11	Chapter 11 Small Volumes Parenteral Preparations Procedural Lab Practice in Classroom–Videotape Process Discussion- Post Video and Personal Critique by 11:59pm Tuesday- Post Constructive Peer Reviews - Due by 11:59pm Wednesday.
Mar 13	Process Validation Competency Assessment: Small-Volume Parenteral Preparations Chapter 11 End of Chapter Questions Due Mar 13 by 11:59pm
March 17- March 23	Spring Break
Week 10 Mar 25	Chapter 12 Ampule Based Preparations Procedural Lab Practice in Classroom–Videotape Process Discussion -Post Video and Personal Critique by 11:59pm Tuesday – Post Constructive Peer Review by 11:59pm Wednesday
Mar 27	Process Validation Competency Assessment: Ampule-Based Preparations Chapter 12 End of Chapter Questions Due Mar 27 by 11:59pm
Week 11 Apr 1	Chapter 13 Controlled Substance Preparation Procedural Lab Practice in Classroom–Videotape Process Discussion -Post Video and Personal Critique by 11:59pm Tuesday- Post Constructive Peer Reviews by Wednesday 11:59pm.

Due Date	
Apr 3	Process Validation Competency Assessment: Controlled Substance Preparations Chapter 13 End of Chapter Questions Due April 3, 2025 by 11:59pm. QUIZ 3 - Chapters 10-13 Due Apr 3, 2025, 11:59pm
Week 12 Apr 8	Chapter 14 Pediatric Preparations Procedural Lab Practice in Classroom–Videotape Process Discussion - Post Video and Personal Critique Tuesday by 11:59pm- Post Constructive Peer Reviews by Wednesday 11:59pm.
Apr 10	Process Validation Competency Assessment: Pediatric Preparations Chapter 14 End of Chapter Questions Due April 10, 2025 by 11:59pm.
Week 13 Apr 15	Chapter 15 Parenteral Nutrition Preparations Procedural Lab Practice in Classroom–Videotape Process Discussion- Post Video and Personal Critique by 11:59pm Tuesday – Post Constructive Peer Reviews by Wednesday 11:59pm.
Apr 17	Process Validation Competency Assessment: Parenteral Nutrition Preparations Chapter 15 End of Chapter Questions Due April 17, 2025 by 11:59pm
Week 14 Apr 22	Chapter 16 Hazardous Drug Preparations Procedural Lab Practice in Classroom–Videotape Process Discussion- Post Video and Personal Critique by Tuesday 11:59pm- Post Constructive Peer Reviews by Wednesday 11:59pm.
Apr 24	Process Validation Competency Assessment: Hazardous Drug Preparations Chapter 16 End of Chapter Questions – Due April 24, 2025 by 11:59pm. Quiz 4– Chapters 14-16 Due April 24, 2025, 11:59pm.
Week 15 April 29	LAB Final Exam
May 1	Final Exam Complete Post Course Evaluation Form Online
Week 16 May 6	Final Exam Retake
May 8	LAB Final Exam Retake

Important Note: This syllabus, along with course assignments and due dates, are subject to change. It is the student’s responsibility to check D2L for corrections or updates to the syllabus. Any changes will be clearly noted in a course announcement or through email.

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook [https://www.com.edu/student-services/docs/Student Handbook 2024-2025 v2.pdf](https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf). *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students with the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodation is requested to contact:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2nd 8-week session is April 30.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.