



PHRA 1445-101CL
Intravenous Admixture and Sterile Compounding
Spring 2023
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: Concepts, Training, and Assessment for Pharmacy Technicians*, by Lisa McCartney, ISBN: 978-0-76384-083-9

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 100% 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.

Exams: There will be one mid-term multiple choice exam and 1 final 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 meeting may be held virtually over Blackboard Collaborate or Microsoft Teams. 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 validations

Lab and Assignment Exercises

Nine process validations passed off with 100% accuracy

Mandatory Nursing and Allied Health Simulation Day-TBD, 8:00am-5:00pm

Determination of Course Grade/Detailed Grading Formula:

Course work will consist of homework assignments/quizzes, 2 multiple choice exams, video posts and peer review, and 9 process validations.

Activity	Percentage Weight
Assignment/Labs	20%
Video/Photo Posts, Personal and Peer Review	20%
Exam 1 - Mid-Term	20%
Exam 2 - Final	20%
Process Validations	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.

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 at 832-677-1423.

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	Teamwork	Ampule-based Preparation: Process Validation Checklist and Trainer Evaluation
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	Teamwork	Process Validation Checklist: Chemotherapy Products and Procedures and Critique Evaluation: Chemotherapy Products and Procedures

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 Frieze, Department Chair at 409-933-8414, or kfrieze@com.edu.

PHRA 1445 Course outline

Due Date	
Week 1 Jan 17	Syllabus and Outline— Registering for National IV Certification through Austin Community College Chapter 1 Exploring the Basics of Sterile Compounding
Jan 19	Chapter 1 Exploratory Labs Chapter 1 Crossword Puzzle (grade) Chapter 1 End of Chapter Questions (grade)
Week 2 Jan 24	Chapter 2 The Sterile Compounding Environment
Jan 26	Chapter 2 Exploratory Lab Chapter 2 Meet the Challenge (grade) Chapter 2 End of Chapter Questions (grade)
Week 3 Jan 31	Chapter 3-Sterile Compounding Supplies
Feb 2	Chapter 3 Exploratory Lab Meet the Challenge Scavenger Hunt Chapter 3 End of Chapter Questions (grade)
Week 4 Feb 7	Chapter 4-Medication Orders and Labeling
Feb 9	Chapter 4 Meet the Challenge Medication Order Activity Chapter 4 Exploratory Lab
Week 5 Feb 14	Chapter 5 Calculations for Sterile Compounding
Feb 16	Chapter 5 Exploratory Lab Chapter 5 End of Chapter Questions
Week 6 Feb 21	Chapter 6 Aseptic Garbing, Hand washing, and Gloving Chapter 6 Exploratory Lab Skill Practice in Classroom–Video Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday-Constructive Personal and Peer Review Due by 11:59pm.
Feb 23	Thursday-Process Validation Checklist Pass-Off-Aseptic Garbing, Hand Washing, and Gloving Chapter 6 End of Chapter Questions
Week 7 Feb 28	Chapter 7 Cleaning the Horizontal Laminar Airflow Hood Chapter 7 Exploratory Lab Skill Practice in Classroom–Video Process

Due Date	
	Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
Mar 2	Process Validation Checklist Pass-Off-Cleaning the Horizontal Laminar Airflow Hood Chapter 7 End of Chapter Questions
Week 8 Mar 7	Review for Exam 1 (Chapters 1-7)
Mar 9	EXAM #1
Mar 13 through Mar 17	SPRING BREAK!
Week 9 Mar 21	Chapter 8 Large Volumes Parenteral Preparations Chapter 8-Procedural Lab Meet the Challenge: Vial-Pressure Mini-Lab Chapter-Pharmacology Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
Mar 23	Process Validation Checklist Pass-off: Large Volume Parenteral Preparations Chapter 8 End of Chapter Questions
Week 10 Mar 28	Chapter 9 Small Volumes Parenteral Preparations Chapter 9 Procedural Labs Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
Mar 30	Process Validation Checklist Pass-Off: Small-Volume Parenteral Preparations Chapter 9 End of Chapter Questions
Week 11 Apr 4	Chapter 10 Ampule Based Preparations Chapter 10 Procedural Lab Meet the Challenge: Ampule Opening Mini-Lab Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.

Due Date	
Apr 6	Process Validation Pass-Off: Ampule-Based Preparations Chapter 10 End of Chapter Questions
Week 12 Apr 11	Chapter 11 Narcotic Preparations Chapter 11 Procedural Lab Meet the Challenge Undercover Narcotic Activity Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
Apr 13	Process Validation Checklist Pass-Off: Narcotic Preparations
Week 13 Apr 18	Chapter 12 Pediatric Preparations Chapter 12 Procedural Lab Meet the Challenge: Neonatal Micro-Dilution Mini-Lab Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
Apr 20	Process Validation Checklist Pass-Off: Pediatric Preparations Chapter 12 End of Chapter Questions
Week 14 Apr 25	Chapter 13 Total Parenteral Nutrition Chapter 13 Procedural Lab Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
Apr 27	Process Validation Checklist Pass-Off: Total Parenteral Nutrition Chapter 13 End of Chapter Questions
Week 15 May 2	Chapter 14 Chemotherapy Products and Procedures Chapter 14 Procedural Lab Meet the Challenge Chemotherapy Spill-Kit Activity Skill Practice in Classroom–Videotape Process Post link to You-tube Video on Blackboard by 11:59pm. Wednesday -Constructive Personal and Peer Review Due by 11:59pm.
May 4	Process Validation Checklist Pass-Off: Chemotherapy Products and Procedures Chapter 14 End of Chapter Questions

Due Date	
Week 16 May 9	Tuesday--EXAM 2

Important Note: This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check Blackboard 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_2022-2023_v2-1.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 accommodations is requested to contact Kimberly Lachney at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student that is needing counseling services is requested to please contact Michelle Brezina in the Student Success Center at 409-933-8520 or mvaldes1@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to setup their appointment. Appointments are strongly encouraged; however some concerns may be addressed on a walk-in basis.

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 only permitted to withdraw six times during their college career by State law. The last day to withdraw is **April 24, 2023**.

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.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention is 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.

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.

Viewing Grades in D2L Brightspace: Students can view their grades by clicking on the **My Grades** link in the course menu in D2L Brightspace.

Required Skills

Students enrolled in this course should possess the following technology skills:

- The ability to use latest stable releases of Google Chrome, Mozilla Firefox, or Safari 10.X web browsers.
- The ability to access information via the Internet
- The ability to use D2L Brightspace and associated tools, including discussion boards, chat rooms, online testing, and assignment submission features
- The ability to use Respondus LockDown Browser and Respondus Monitor (see section, “Using LockDown Browser and a Webcam for Online Exams” for more details)
- The ability to use any necessary publisher content (examples: Cengage, SIMnet, MindTap, MyMathLab, etc.)
- The ability to use word processing software, and to save in alternate formats
- The ability to send, receive and include attachments using email
- The ability to demonstrate netiquette (appropriate online conduct)

Software and Hardware

- Minimum recommended computer and internet configurations for online courses can be found [here](#).
- Internet connection (DSL, LAN, or cable connection desirable)
- An up-to-date operating system from Microsoft or Apple - PC platforms should run Windows 7 or newer; Mac platforms should run OS 10.8 or newer (Chromebooks, tablets, and mobile devices are not compatible with all online course components)
- Access to D2L Brightspace
- Latest stable release of JAVA
- 256 MB RAM
- 20 MB free disk space
- A microphone and headphones (A headset with microphone/headphones is highly recommended, but not required.)
- Webcam
- Any other tools, resources, and materials needed by the student for the course.

Technical Assistance

For technical assistance during the course or to report a problem with D2L Brightspace you can visit the Educational Technology Services support site: <http://de-support.com.edu/requests>

For technical assistance with campus Wi-Fi, COM user ID or password, and other campus related IT needs, visit: <https://helpdesk.com.edu/>

Online Etiquette (Netiquette)

Discussion, chat, and e-mail spaces within this course are for class purposes only, unless otherwise stated. Please remember to conduct yourself collegially and professionally. What you say in the online environment is documented and not easily erased or forgotten.

The following guidelines apply:

- Avoid using ALL CAPS, sarcasm, and language that could come across as strong or offensive.
- Use proper punctuation and grammar, and be sure to edit your contribution before posting.
- Read all posts before contributing your own to avoid unnecessarily repeating information.
- Keep chat comments brief and to the point.
- Focus on one topic at a time when chatting or posting to discussions.
- Remember that what you say in discussions and chats is documented and available to be revisited. Choose your words and discussion topics carefully.
- E-mail should only be used for messages pertaining to the course. Please refrain from sending forwards, jokes, etc.

Technology Outage

Students are responsible for maintaining their hardware, software, and Internet connection to the course. If you are incapable of maintaining your own system, please use the computers available on campus or take the CL section of the course. (NB, Access to college computers is limited by the hours of operation for the computer labs and library. You are responsible for staying abreast of these times.) No additional time will be provided for hardware, software, or Internet connection problems that interfere with your ability to access the course and complete your assignments and assessments. If a verifiable interruption in the access to the Course Management System that lasts for fifteen minutes or longer and occurs within twenty-four hours of an assignment or assessment, the deadline for the assignment or assessment may be extended at the discretion of your instructor.