

PHA5164L: Professional Skills Laboratory 4

Spring 2024

1 Credit Hour – A-E Grading

This course continues the development of essential skills a pharmacist is expected to perform in daily practice. The skills emphasized during this course include gathering patient data, assessing the information to identify problems, developing an individualized care plan, implementing the care plan and monitoring and evaluating a patient. Additional skills include sterile compounding, collaborating as an interprofessional team member, safe and accurate dispensing of medications and contributing to a culture of safety and improvement. The focus is caring for patients with gastrointestinal, renal, and endocrine diseases with problems that are simple to moderate in complexity. The patient care skills and tasks taught in this course will prepare you to enter into hospital practice settings during your Hospital Introductory Pharmacy Practice Experience (HIPPE) and care for more complex patients in all settings.

Teaching Partnership Leader

Janet Schmittgen, Pharm.D.

Email: jschmittgen@cop.ufl.edu

Office: HPNP2335

Phone: 352-273-9547

Office Hours: By appointment ONLY for private meetings, Zoom office hours TBA

See Appendix A. for Course Directory of Faculty and Staff Contact Information.

Entrustable Professional Activities

This course will prepare you to perform the following activities which the public entrusts a pharmacist to perform:

Patient Care Provider Domain

1. Collect information to identify a patient's medication-related problems and health-related needs.
2. Analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs.
3. Establish patient-centered goals and create a care plan for a patient in collaboration with the patient, caregiver(s), and other health professionals that is evidence-based and cost-effective.
4. Implement a care plan in collaboration with the patient, caregivers, and other health professionals.
5. Write a note that documents the findings, recommendations, and plan from a patient encounter.

Interprofessional Team Member Domain

6. Collaborate as a member of an interprofessional team.

Population Health Promoter Domain

7. Identify patients at risk for prevalent diseases in a population.
8. Minimize adverse drug events and medication errors.
9. Maximize the appropriate use of medications in a population.

Information Master Domain

11. Educate patients and professional colleagues regarding the appropriate use of medications.

Practice Manager Domain

13. Oversee the pharmacy operations for an assigned work shift.
14. Fulfill a medication order.

Course-Level Objectives

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

1. Demonstrate appropriate and safe sterile compounding technique with a variety of sterile compounded medications.
2. Accurately complete calculations related to sterile compounded medications.
3. Accurately calculate the "Beyond Use Date" for sterile compounded medications and verify compounded Sterile Products.
4. Accurately verify orders in an EHR in the inpatient setting.
5. Utilize an electronic health record (EHR) to collect relevant information for a specific patient and disease state to assess appropriateness of drug therapy.
6. Perform discharge counseling.
7. Present a succinct oral patient summary and therapeutic plan recommendations to another healthcare provider.
8. Communicate with other healthcare professionals verbally and in the EHR.
9. Document patient care recommendations and interventions in the EHR.
10. Formulate a therapeutic plan, including nonpharmacological options, for patients with changing kidney function, diabetes, or who is pregnant or breastfeeding.
11. Defend a therapeutic plan in writing and verbally using guidelines and primary literature for patients at risk for or with the following disease states:
 - a. Acute kidney injury
 - b. Diabetes
 - c. Diabetic Ketoacidosis
 - d. Pregnancy/Breastfeeding
 - e. Prevention of Pregnancy
12. Counsel a patient on a therapeutic plan.
13. Apply cost-benefit, formulary, and/or epidemiology principles to medication-related decisions.
14. Follow an evidence-based disease management protocol.
15. Interpret laboratory test results.
16. Find and interpret clinical evidence in the literature for using medication during pregnancy and lactation
17. Compare and contrast contraceptive options and pregnancy testing devices, including emergency contraception and contraception post-partum.
18. Critically evaluate a primary literature article and apply finding to patient cases.
19. Demonstrate attributes that promote a professional therapeutic relationship (e.g. empathy, cultural competency) when communicating with a patient and/or their family.
20. During all skills laboratory simulations and activities:
 - a. Demonstrate altruism, integrity, trustworthiness, flexibility, and respect in all interactions.
 - b. Display preparation, initiative, and accountability consistent with a commitment to excellence.
 - c. Deliver patient-centered care in a manner that is legal, ethical, and compassionate.
 - d. Recognize that one's professionalism is constantly evaluated by others.

Course Pre-requisites

Completion of coursework in the first three semesters of the Doctor of Pharmacy program

Course Co-requisites

- PHA5104: Sterile Compounding
- PHA5784: Patient Care 4- GI/Renal
- PHA5785: Patient Care 5 – Endocrine/Women’s Health/Men’s Health

Course Outline

See Appendix. Please routinely check your campus calendar and the Canvas course site for any messages about changes in the schedule including meeting dates/times, deadlines, and room changes.

For locations and times of lab sessions, view Appendix B Lab Location & Sessions.

Required Textbooks/Readings

There are no required textbooks for this course.

Suggested Textbooks/Readings

There are no suggested textbooks for this course.

Other Required Learning Resources

Top 300 Drugs Flashcards

- The flashcards are available for free through Access Pharmacy Study Tools: <https://accesspharmacy.mhmedical.com/qa.aspx?groupid=955>

EHR Go

- EHR Go is an educational EHR used throughout the PharmD curriculum, including in skills lab, patient care courses and capstones. Students will be expected to purchase a subscription to this program.
- Create your EHR Go account by going to: <http://ehrgo.com>. Select **Subscribe** in the upper, right corner and enter the following Pharmacy Student Program Key: **S96Y29**
- Follow the on-screen instructions to create your account and apply your subscription. Refer to Canvas for more detailed information
 - 2PDs are encouraged to purchase a 2 year Student Subscription
 - 3PDs are encouraged to purchase an Academic Year Student Subscription

Materials & Supplies Fees

\$40.90 per student

Student Evaluation & Grading

Table 1.1 Evaluation and Grading

Assessment Item	Grade Percentage
Weekly Pre-Lab Quizzes (n=10; 2% each)	20%
Weekly Performance Assessment (n=13; 5% each)	65%
Top 200 Drug Exam	15%
Total	100%

Table 1.2 Grading Scale

Percentage	Letter Grade
92.50-100%	A
89.50-92.49%	A-
86.50-89.49%	B+
82.50-86.49%	B
79.50-82.49%	B-
76.50-79.49%	C+
72.50-76.49%	C
69.50-72.49%	C-
66.50-69.49%	D+
62.50-66.49%	D
59.50-62.49%	D-
< 59.50%	E

Rounding of grades:

Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is X.495 or higher, Canvas will round the grade to X.50. The above scale depicts this policy and grades are determined accordingly. Grade assignment is made using this policy and NO EXCEPTIONS will be made in situations where a student's grade is "close."

Educational Technology Use

The following technology below will be used during the course and the student must have the appropriate technology and software.

1. ExamSoft™ Testing Platform
2. Canvas™ Learning Management System

For technical support, navigate to [Educational Technology and IT Support Contact Information](http://curriculum.pharmacy.ufl.edu/current-students/technical-help/) at this URL:
<http://curriculum.pharmacy.ufl.edu/current-students/technical-help/>

Artificial Intelligence Use

The use of artificial intelligence (AI) text generators such as ChatGPT on assignments, projects, quizzes, and exams is prohibited in this course. Use of AI text generators is considered evidence of academic dishonesty. If a student is uncertain about the use of AI technology, it is the student's responsibility to ask the instructor prior to beginning the assignment or assessment.

Pharm.D. Course Policies

The Policies in the following link apply to this course. Review the [Pharm.D. Course Policies](http://curriculum.pharmacy.ufl.edu/current-students/course-policies/) carefully, at this URL:
<http://curriculum.pharmacy.ufl.edu/current-students/course-policies/>

Course-Specific Policies

The Policies in the following link apply to Skills Lab courses. Review the [Skills Lab Policies](http://curriculum.pharmacy.ufl.edu/current-students/course-policies/skills-lab-policies/) carefully at this URL:
<http://curriculum.pharmacy.ufl.edu/current-students/course-policies/skills-lab-policies/>

Weekly Pre-Lab Quizzes

Weekly pre-lab quizzes will be administered online through Canvas. Quizzes will consist of knowledge related to that week's module and covered during pre-lab preparatory activities (e.g., videos and readings). Quizzes will consist of multiple choice, true/false, or case-based questions. Weekly pre-lab quizzes will be completed at the start of each lab session. Performance on quizzes is an individual effort and collaboration is not permitted.

Students who arrive after the start of the pre-lab quiz will be given a paper copy and only allowed the remaining time to complete the quiz. (E.g. a student who arrives 3 minutes after the start of the pre-lab quiz will be given a paper copy and allowed the 7 minutes remaining to complete the quiz). If you have an excused absence from lab, you will be excused from taking the quiz (EX in the gradebook). No make-up quizzes will be offered

Quiz questions/answers for pre-lab quizzes in skills labs will not be released to students. This is consistent with the patient care courses. Faculty may choose to clarify difficult questions and students are encouraged to come talk to the faculty if they have questions about what they missed on a specific prelab quiz.

Top 200 Drug Exam

We will be using the Top 300 Drug Cards available for free to students and faculty through Access Pharmacy. A list of the drugs students are expected to know each semester will be posted on Canvas.

- Students will be expected to know the following information:
 - § 2PD year: 64 drugs in the fall (Cardiovascular (46), Anti-infective (18), 55 drugs in the Spring Respiratory (14) Gastrointestinal (n=11) and Anti-diabetic (n=14), Men's/Women's Health (n=16); students will be responsible for knowing the brand/generic, therapeutic class, common FDA label indication, MOA, Pregnancy category ONLY IF "Contraindicated" (meaning patients shouldn't use it during pregnancy, see Top 200 List), Box Warnings (see Top 200 List) common adverse reactions (>10%) and key patient counseling points
- Exam is **ALWAYS** cumulative: any card, any info, any drug that they've been assigned previously is fair game (based on 2PD Top 200 Drug list)
- Cut scores per course:
 - 1PD: 80%
 - 2PD: 80%
 - 3PD: 80%
- Question make-up: each exam will be 75 questions total (50 Questions new material 25 Questions old 2PD material from Fall Semester)
 - Students must obtain **80% or better on this exam in order to pass the course**. Those who do not achieve this score will retake the exam (maximum of two retakes permitted). This grade is also tracked within the Milestones course. Please see that course syllabus for minimum performance requirements and how the results are used as milestone assessments. The score earned on the first attempt will be the score which will be used for determining the course grade. Students who fail to obtain a passing score after three attempts will fail the course. Failing to pass this course may result in a student's progression through the curriculum being delayed.
 - This is a self-taught portion of the course and students are responsible for preparing themselves for the exam.
 - A list of the drugs that will appear on the examination will be released at the beginning of the course.
 - In the event of a REAL EMERGENCY (illness, sudden death in the family), a make-up examination may be provided and is at the discretion of the teaching partnership leader.

Skills Lab Attendance Policy

Attendance is mandatory for active learning sessions such as team-based learning sessions, case discussions, laboratory sessions, and other activities that the instructor designates as required. This course has 13 required sessions. A student who misses greater than 2 laboratory sessions without making up the material will receive an incomplete in the course and will retake the course during the next offering, resulting in delayed graduation.

Assignment Re-grade Policy

When a student doesn't agree with a resident/APPE students' grade on a WRITTEN assignment, the student may request a regrade

- The student must submit the request in writing to course director within 7 days of receiving the grade
- Students acknowledge that the grade on the assignment could increase or decrease as a result of the regrade
- There will not be a regrade option for verbal assignments. Students should request feedback from their grader at the conclusion of their verbal presentation (for example, patient counseling, case presentation, etc)

Makeup Assignments

Makeup assignments may be required for excused absences from all Skills Lab Sessions. Pre-lab assignments are required for students who are absent from a Skills Lab Module. Students will be required to complete the makeup or Pre-lab assignment within one week of the missed session.

Late Assignments

- 0-24 hours late: 25% reduction of the earned score (max score possible: 75%)
- 24-48 hours late: 50% reduction of the earned score (max score possible: 50%)
- 48 hours late: Assignment will be assigned a score of 0

Accessibility and Belonging Statement

The University of Florida College of Pharmacy strives to stimulate a culture that promotes diversity and inclusion within an exceptional community of students, faculty, and staff. It is our intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit.

We intend to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let us know ways to improve the course's effectiveness for you personally or for other students or student groups.

If any of our class meetings conflict with any of your religious events, an excused absence will be provided when requested using the standard UF COP process as detailed in the [UF COP Course policies](#).

If you feel that you have experienced or witnessed any bias/treatment that falls short of these expectations, you may submit a report through the UF [COP Student Mistreatment Report](#).

Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Appendix A. Course Directory

Teaching Partnership Leader/Course Director:

Janet Schmittgen, Pharm.D.

Email: jschmittgen@cop.ufl.edu

Office: HPNP 2335

Phone: 352-273-9547

Office Hours: See Canvas

Questions to Ask:

- Questions about grades
- Concerns about performance
- Guidance when there are performance problems (failing grades)
- General questions about content

Instructional Designer:

Skylar Johnson, M.A.

- Email: skylarjohnson@cop.ufl.edu
- Phone: 352 – 273 - 5719

Academic Coordinator:

Hanna Stallard

- Email: hstallard@ufl.edu
- Office: HPNP 4309
- Phone: 352 – 273 - 6312

[Absence Request Ticket 2PD](#)

Questions to Ask:

- Issues related to course policies (absences, make up exams, missed attendance)
- Absence requests (Only the Academic Coordinator handles absence requests)
- Questions about dates, deadlines, meeting place
- Availability of handouts and other course materials
- Assignment directions
- Questions about grade entries gradebook (missing grades, wrong grade)

- Assistance with ExamSoft® (Distant campus students may contact Education Coordinator for use of SofTest and assistance during exams. The Academic Coordinator is the contact person for issues related to grading and posting of ExamSoft grades.)

Other Teaching Partnership Faculty Members:

Jacksonville Campus Coordinator: (Office Hours on Canvas)

Jessica Huston, Pharm.D.

Email: Jessicahuston@cop.ufl.edu

904-244-9590

Orlando Campus Coordinator: (Office Hours on Canvas)

Lisa Vandervoort, Pharm.D.

Email: lvandervoort@cop.ufl.edu

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Kelsey Cook, Pharm.D.

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Priti Patel, Pharm.D., BCPS

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Angelina Vascimini, Pharm.D.,

Email : avascimni@cop.ufl.edu

Appendix B: Course Outline

Please refer to Canvas for pre-lab activities, videos and readings that are required for lab preparation. Modules will open each week on Wednesday evening. *The first faculty name in each "Responsible" cell indicates the module leader.*

Date	Mod#	Activity	Lab Session	Objectives	Contact Time (hr)	Responsible
01/09/24	1	Lab	Garbing, Fluid Naming and Aseptic Technique	1,2,3	2	Janet L Schmittgen, Lisa M Vandervoort, Jessica Huston, Tracy Leonard
01/16/24	2	Lab	Sterile Compounding II: Calculations	1,2,3	2	Janet L Schmittgen, Lisa M Vandervoort, Jessica Huston, Kayihura Manigaba, Tracy Leonard, Kelsey Cook,
01/23/24	3	Lab	Sterile Compounding III: Sterility, Stability, and Verification	1,2,3	2	Janet L Schmittgen, Lisa M Vandervoort, Jessica Huston, Tracy Leonard, Kelsey Cook,
1/26/24 from 10am-12pm		Lab	Make-Up Lab or Remediation for Calculations, Open lab for Sterile Products Practice Will be required for students who miss ANY of Modules 1-3 or who do not achieve a passing grade for any of these module assessments			Janet L Schmittgen, Lisa M Vandervoort, Jessica Huston, Kelsey Cook, Tracy Leonard
01/30/24	4	Lab	Sterile Compounding IV: Individual Assessment of IV Technique	1,2,3	2	Janet L Schmittgen, Lisa M Vandervoort, Jessica Huston, Tracy Leonard, Kelsey Cook, Kayihura Manigaba
02/06/24	5	Lab	EHR Go: Order Verification	4,5	2	Adonice Paul Khoury, Janet L Schmittgen, Jessica Huston, Lisa M Vandervoort, Tracy Leonard
02/13/24	6	Lab	Discharge Counseling	6,9	2	Kayihura Manigaba, Janet L Schmittgen, Jessica Huston, Kelsey Cook, Lisa M Vandervoort, Tracy Leonard
02/20/24	7	Lab	Patient Case Presentations	4,7	2	Bethany Ruth Shoulders, Janet L Schmittgen, Jessica Huston, Kelsey Cook, Lisa M Vandervoort, Tracy Leonard
02/26/24 (*Monday*)	8	Lab	Adjusting Medication for Changing Renal Function in the Hospital	4,7,8,9,10,11	2	Tracy Leonard, Kaitlin Alexander

Date	Mod#	Activity	Lab Session	Objectives	Contact Time (hr)	Responsible
						Janet L Schmittgen, Jessica Huston, Kayihura Manigaba, Kelsey Cook, Lisa M Vandervoort
03/05/24	9	Lab	Insulin and other injectables	4,7,8,9,10,11,12	2	Angelina Vascimini , Janet L Schmittgen, Jessica Huston, Kelsey Cook, Lisa M Vandervoort, Tracy Leonard
03/19/24	10	Lab	Complications of Chronic Diabetes	4,7,8,9,10,11,12	2	Angelina Vascimini , Janet L Schmittgen, Jessica Huston, Kelsey Cook, Lisa M Vandervoort, Tracy Leonard, Kayihura Manigaba
04/02/24	11	Lab	DKA and Diabetes in the Hospital Setting	4,7,8,9,10,11,12	2	Carinda J Feild , Janet L Schmittgen, Jessica Huston, Kelsey Cook, Lisa M Vandervoort, Tracy Leonard
04/09/24	12	Lab	Women's Health	10,11,12,13,14	2	Jessica Huston, Kelsey Cook , Janet L Schmittgen, Lisa M Vandervoort, Tracy Leonard
04/16/24	13	Lab	Journal Club	18	2	Priti Patel , Janet L Schmittgen, Jessica Huston, Kayihura Manigaba, Kelsey Cook, Lisa M Vandervoort, Tracy Leonard

Appendix C. Lab Locations & Sessions

Gainesville

- **Location:** Pharmacy Skills Lab
- **Sessions**
 - Session 1: 8:00am-9:50am Teams 1-6
 - Session 2: 10:00am-11:50am Teams 7-12
 - Session 3: 1:00pm-2:50pm Teams 13-18
 - Session 4: 3:00pm-4:50pm Teams 19-21

Jacksonville

- **Location:** COP Lab
- **Sessions**
 - Session 1: 10:00am-11:50am Teams 26-28
 - Session 2: 1:00pm-2:50pm Teams 22-25

Orlando

- **Location:** Room 435
- **Sessions**
 - Session 1: 8:00am-9:50am Teams 29-32
 - Session 2: 10:00am-11:50am Teams 33-37
 - Session 3: 1:00pm-2:50pm Teams 38-41

Appendix D. Weekly Performance Assessment Checklist Example

GATOR Way Patient Counseling Rubric

	Counseling Points	Each item is worth 5 points		
G	Identifies/introduces self as the student pharmacist.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Explains the purpose of the counseling session	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
A	Identifies/confirms patient or patient’s representative.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Makes appropriate use of the patient profile	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Assesses patient understanding of the reason for therapy.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
T	Verifies the name of the medication.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Provides dosage/regimen for medication.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Provides indication for medication.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Discusses potential (major) side effects.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Discusses potential warning, precautions, and interactions.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Describes missed dose instructions.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Provides number of refills.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Discusses storage recommendations.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Addresses any real or anticipated patient concerns.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
O	Uses open-ended questions throughout counseling session.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Verifies patient understanding via teach back method.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Displays effective nonverbal behaviors (eye contact and body language).	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
R	Summarizes by emphasizing key points of information.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
	Provides closure and opportunity for follow-up.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
WAY	Student presents facts and concepts in a logical order.	Novice <input type="checkbox"/> 1 pt	Competent <input type="checkbox"/> 3 pts	Proficient <input type="checkbox"/> 5 pts
	Student provided accurate information.			
	Student provided understanding and empathetic responses.			

	Student maintained control and direction of the counseling session.			
TOTAL SCORE			<u> </u>	100

- G = Greet
- A = Acknowledge
- T = Teach (using language patient will understand)
- O = Observe Patient Understanding
- R = Repeat/Review
- WAY = Global assessment