PHRD 4049 – Integrated Lab Sequence II

I. Contact Information:

Course Coordinator:

Anthony L. Walker, Pharm.D. Bienville Building Room 217 (318)342-1708 awalker@ulm.edu

Lab Schedule:

Tuesday: 1-3:50 p.m. Thursday: 1-3:50 p.m.

Office Hours:

Monday: 1 – 3 p.m. Tuesday: 9 - 11 a.m. Thursday: 9 - 11 a.m. Friday: 9 – 11 a.m. By Appointments

Course Instructors

Professor	Office and Phone #	Email Address	
Barbo, Ashley	B213 318-342-7336	barbo@ulm.edu	
Evans, Jeff	B225 318-342-1745	jevans@ulm.edu	
Matthaiolampakis,	B370 318-342-7930	matthaiolampakis@ulm.edu	
George			
Sampognaro, Laurel	B174F 318-342-1721	sampognaro@ulm.edu	
Walker, Anthony L.	B217 318-342-1708	awalker@ulm.edu	

II. Course Prerequisites/ Co-requisites

Pre-requisites: PHRD 4020 Integrated Lab Sequence I Co-requisites: P1 Standing

III. Course Description:

1 cr. Course: Second in a six-semester longitudinal course sequence reinforcing students' knowledge, skills, and attitudes necessary for current and future pharmacy practice, particularly for the community setting.

IV. Curricular Objectives and Outcomes

Domain 1 – Foundational Knowledge

1.1.1 Develop and demonstrate depth and breadth of knowledge in clinical sciences.

1.1.4 Apply knowledge in foundational sciences to solve therapeutic problems and advance patient-centered care.

Domain 2 – Essentials for Practice and Care

2.1.2 Interpret evidence and patient data

- 2.1.3 Prioritize patient needs
- 2.1.4 Formulate evidence based care plans, assessments, and recommendations

2.1.7 Document patient care related activities

2.2.3 Utilize technology to optimize the medication use system.

2.2.6 Apply standards, guidelines, best practices, and established processes related to safe and effective medication use

Domain 3 – Approach to Practice and Care

3.1.1 Identify and define the primary problem

3.1.2 Define goals and alternative goals

3.1.5 Implement the most viable solution, including monitoring parameters, to measure intended and unintended consequences

3.2.5 Adapt instruction and deliver to the intended audience

3.2.6 Assess audience comprehension

3.6.2 Actively listen and ask appropriate open and closed-ended questions to gather information

3.6.4 Use effective interpersonal skills to establish rapport and build trusting relationships

3.6.5 Communicate assertively, persuasively, confidently, and clearly

3.6.7 Deliver and obtain feedback to assess learning and promote goal setting and goal attainment

3.6.9 Document patient care activities clearly, concisely, and accurately using appropriate medical terminology

Domain 4 – Personal and Professional Development

4.1.4. Approach tasks with a desire to learn.

4.1.5. Demonstrate persistence and flexibility in all situations; engaging in help seeking behavior when appropriate.

4.1.6. Strive for accuracy and precision by displaying a willingness to recognize, correct, and learn from errors.

4.4.1 Demonstrate altruism, integrity, trustworthiness, flexibility, and respect in all interactions.

4.4.2 Display preparation, initiative, and accountability consistent with a commitment to excellence.

4.4.4 Recognize that one's professionalism is constantly evaluated by others.

ACPE Appendix 1 Elements

Biomedical Sciences

<u>Human Anatomy</u>: Structure of major human body systems at the cellular, tissue, organ, and system level.

<u>Immunology</u>: Human immune system components, innate and adaptive immune responses to infection, injury and disease, and augmentation of the human immune system to prevent disease.

<u>Medical Microbiology</u>: Structure, function, and properties of microorganisms (bacteria, viruses, parasites, and fungi) responsible for human disease, and rational approaches to their containment or eradication.

<u>Pathology/Pathophysiology</u>: Basic principles, mechanisms, functional changes and metabolic sequelae of human disease impacting cells, organs, and systems.

Pharmaceutical Sciences

<u>Extemporaneous Compounding</u>: Preparation of sterile and non-sterile prescriptions which are pharmaceutically accurate regarding drug product and dose, free from contamination, and appropriately formulated for safe and effective patient use. Analysis of the scientific principles and quality standards upon which these compounding requirements are based.

<u>Pharmaceutical Calculations</u>: Mastery of mathematical skills required to accurately prepare prescriptions (including extemporaneously compounded dosage forms) that are therapeutically sound and safe for patient use. Calculation of patient-specific nutritional and drug dosing/delivery requirements.

<u>Pharmaceutics/Biopharmaceutics</u>: Physicochemical properties of drugs, excipients, and dosage forms important to the rational design and manufacture of sterile and non-sterile products. Application of physical chemistry and dosage form science to drug stability, delivery, release, disposition, pharmacokinetics, therapeutic effectiveness, and the development of quality standards for drug products.

Social/Administrative/Behavioral Sciences

<u>Pharmacy Law and Regulatory Affairs:</u> Federal and appropriate state-specific statutes, regulations, policies, executive orders, and court decisions that regulate the practice of pharmacy, including the mitigation of prescription drug abuse and diversion.

<u>Professional Communication</u>: Analysis and practice of verbal, non-verbal, and written communication strategies that promote effective interpersonal dialog and understanding to advance specific patient care, education, advocacy, and/or interprofessional collaboration goals. Exploration of technology-based communication tools and their impact on healthcare delivery, healthcare information, and patient empowerment.

<u>Professional Development/Social and Behavioral Aspects of Practice</u>: Development of professional self-awareness, capabilities, responsibilities, and leadership. Analysis of contemporary practice roles and innovative opportunities, and inculcation of professional attitudes, behaviors, and dispositions.

Clinical Sciences

<u>Health Information Retrieval and Evaluation:</u> Critical analysis and application of relevant health sciences literature and other information resources to answer specific patient-care and/or drug-related questions and provide evidence-based therapeutic recommendations to healthcare providers or, when appropriate, the public.

<u>Medication Dispensing, Distribution and Administration</u>: Preparation, dispensing and administration of prescriptions, identification and prevention of medication errors and interactions, maintaining and using patient profile systems and prescription processing technology and/or equipment, and ensuring patient safety. Educating about appropriate medication use and administration.

<u>Patient Assessment</u>: Evaluation of patient function and dysfunction through the performance of tests and assessments leading to objective (e.g., physical assessment, health screening, and lab data interpretation) and subjective (patient interview) data important to the provision of care.

<u>Patient Safety</u>: Analysis of the systems- and human-associated causes of medication errors, exploration of strategies designed to reduce/eliminate them, and evaluation of available and evolving error-reporting mechanisms.

<u>Self-Care Pharmacotherapy</u>: Therapeutic needs assessment, including the need for triage to other health professionals, drug product recommendation/selection, and counseling of patients on non-prescription drug products, non-pharmacologic treatments and health/wellness strategies.

V. Course-Specific Objectives and Outcomes:

At the conclusion of this course, students should be able to: Demonstrate knowledge, skills, and attitudes related to first professional year course material.

VI. Course Topics – See Tentative Teaching Schedule

VII. Instructional Methods and Activities:

Teaching methods may include, but are not limited to: case/scenario based teaching; problem-based learning; service learning; individual/group exercises; self-directed learning; errors and omissions; role playing; online teaching; applied learning; point-ofcare testing; projects/presentations; assignments/exercises; traditional lectures and the use of technology such as Power Point, Audience Response System, Human Patient Simulation, Distance Learning, Camtasia, Zoom, and Moodle online assignments.

VIII. Evaluation and Grade Assignment:

Weekly laboratory exercises and assignments will account for 75% of the final lab grade. Quizzes concerning assigned pre-lab exercises and/or reading materials may be given at any time throughout the semester and will be counted as part of the weekly lab grade. It is extremely important to prepare for weekly laboratory exercises, as they account for most of the total lab grade.

Quizzes covering the "Top 200 Drugs" will account for 10% of the lab grade. Each drug quiz will cover 10 cards per week for a total of 10 quizzes in this lab course; the second 100 drugs will be covered in the next lab sequence. Please refer to the Top 200 Drug Quiz Schedule. Quiz content will include the brand and generic names, drug class, and dosage form(s). Please refer to the Top 200 Drug Quiz schedule. A drug quiz average of 70% or higher is required in order to pass this course. Students with a quiz average below 70% after the last quiz will be allowed a targeted remediation of the drug quizzes. This test will be administered by the lab coordinator during the last week of scheduled labs (the week before finals). The student must score at least a 70% on this exam in order to pass this course. The student will then receive a 70% average for the drug quiz final average.

Professionalism will total 10% of the final lab grade. Each week, 5 points may be earned or lost. Demeanor, enthusiasm, neatness, laboratory technique will be evaluated. <u>All</u> points will be deducted for not wearing lab coat or for other dress code infractions, for poor condition of laboratory equipment, desk or drawer, or for poor demeanor/attitude in lab. <u>This will be checked weekly</u>. If benches are always clean and drawers neat and the student always wears a pharmacy jacket and conducts themself in a professional manner, all 5 points will be earned. <u>A dress code will be enforced in this course (see section J)</u>. **Food or drink is not permitted by the lab stations. You may keep a bottle of water only (no other beverage – colas or coffee) by your backpacks or lunch in your lunch bag.**

The Longitudinal Readiness Exam (see explanation below) will account for 5% of your final grade.

The faculty member(s) facilitating the lab will develop lab assignments. All lab exercises will total 75% of your final grade. The lab is based on a 10 point grading scale:

 $\begin{array}{l} A = 89.5 - 100 \\ B = 79.5 - 89.4 \\ C = 69.5 - 79.4 \\ D = 59.5 - 69.4 \\ F = \leq 59.4 \end{array}$

Exercises and/or quizzes will NOT be given early, except when deemed necessary by the instructor. If you have an unexcused absence, missed quizzes and/or laboratory exercises cannot be made up.

Laboratory Exercises	75%
Drug Quizzes	10%
Longitudinal Readiness Exam	5%

Professionalism	<u>10%</u>
Total	100%

Undergraduate mid-term grades will be posted on-line for students to view via Banner. Mid-term grades indicate a student's status at mid-semester only and do not indicate the final performance outcome of a student. Any student earning a non-passing grade of "D" or "F" on an exam will be required to participate in mandatory tutoring sessions offered by the course instructor(s) until such a time that they obtain a passing average in the course.

IX. Longitudinal Readiness Exam

In accordance with the Student Assessment Plan, at the conclusion of each semester students will be required to complete a longitudinal exam, which will be administered and count towards the grade of the corresponding integrated lab sequence (ILS) course. The exam will consist of NAPLEX-style assessment questions that assess retention of concepts taught in all courses and will count for one lab grade.

Longitudinal assessments will be comprehensive over all coursework but will focus on material taught in the semester in which the exam is offered.

For example: The exam offered in the fall semester of the P1 year will only test information covered in fall P1 courses, but the exam offered in the spring of the P2 year will focus on information covered in spring P2 courses, but a portion of the exam may test on concepts from any course offered previously.

Missing a Longitudinal assessment exam with an unexcused absence will result in the student receiving a zero (0) for the exam without the possibility of making up the exam.

<u>Student Success Policy</u>: <u>http://www.ulm.edu/pharmacy/documents/ospa/earlyintervention.pdf</u>

Remediation Policy: http://www.ulm.edu/pharmacy/documents/ospa/remediationpolicy.pdf

X. Class Policies and Procedures:

At a minimum, all policies stated in the current ULM Student Policy Manual & Organizational Handbook should be followed.

Federal Regulations require *determination and verification of every students' physical location while enrolled in classes (where they are physically located while taking classes), regardless of the delivery method (on campus, online). At the beginning of every semester and whenever physical location changes, students must update or verify their current location through banner* <u>https://ssb-</u>

<u>prod.ec.ulm.edu/PROD/bwgkogad.P_SelectAtypUpdate</u>. Students should do this by the end of the first week of classes.

This course is a major requirement for the PharmD degree in Pharmacy. Completion of degree requirements leads to eligibility for professional licensure and/or certification in Louisiana upon graduation. Federal Regulations require universities to provide

information to students about the alignment between Louisiana's requirements and those of other states. ULM has created a web page with discipline-specific information containing hyperlinks to Licensure Boards in the United States

<u>https://www.ulm.edu/professional-licensure-disclosures/index.html</u>. Program Directors and/or faculty will discuss this information with you during advising or other program meetings but is also available to answer questions and address any concerns you might have. It is also important to note that licensure or certification requirements are subject to change. Although ULM Program Directors annually review and update licensure information for every state, the faculty recommends that before enrolling in a program and throughout enrollment, students communicate with the applicable state board to confirm understanding and whether upon completion of ULM's program, they will meet requirements.

(See <u>http://www.ulm.edu/studentpolicy/</u>). Additional class policies include:

A. Textbook and Materials: A nonprogrammable calculator may be required for some class assignments; please have available at all times. Texts for all co-requisite courses. Sigler's Top 300 Drug Cards Book is Highly Recommended for this course. Information for your drug quizzes will come direct from this book.

B. Attendance Policy:

Class attendance is regarded as an obligation as well as a privilege, and students are expected to know attendance regulations and to attend regularly and punctually at classes in which they are enrolled. Failure to do so may: (1) prevent access to the classroom during regularly scheduled times; (2) jeopardize a student's scholastic standing; and (3) lead to suspension from the School or University. Students must submit excuses for class absences to course coordinators within three class days after returning to classes.

Professors shall accept an official University excuse. With the following exceptions, professors are to determine whether absences are excused or unexcused: 1) Absences arising from authorized trips away from the University or from special duties at the University shall be excused. 2) Absences arising from a student's confinement in a hospital or other in-patient facility or doctor's excused absences shall be excused. Students are responsible for verifying providing documentation to the faculty, which will be verified. 3) Absences arising from a death in the immediate family shall be excused. The immediate family is defined as spouse, child, step-child, mother, father, sister, brother, grandmother, grandfather, step-mother, step-father, step-brother, step-sister, aunt, uncle, mother-in-law or father-in-law.

C. Make Up Policy

STUDENTS MISSING A GRADED EXERCISE

Each student is expected to attend lab at the **date and time specified**. If a student cannot attend lab, they must email or speak directly with the course coordinator

prior to the lab or as soon as possible. The ULM COP Excused Absence Policy must be followed. Please refer to the official document for details. If possible, students with excused absences will be switched to an alternate lab section to complete the activity as scheduled. If this is not possible, make-up of excused absences will be given at the discretion of the course coordinator. Make-up lab exercises will be prepared at the same or higher level than the original exercise and may be given as a written exam or an oral exam in the presence of another faculty member. Failure to attend a scheduled make-up lab will result in a zero (0) grade for those lab activities. Students missing lab exercises due to a University approved excuse may make-up the lab exercises at a time determined by the course coordinator. Students with **unexcused absences** will **not** be allowed to attend a different section within the same week of the missed lab as this provides an unfair advantage to students in the earlier sections. Students with **unexcused absences** will **only** be allowed to make-up **high stakes** assessments such as OSCEs. The missed assessment will result in a zero (0) grade in the gradebook until the make-up assessment is completed. Grading of the make-up will follow the remediation policy with a zero (0) counting as the first attempt. http://www.ulm.edu/pharmacy/currents.html

CONTACTING COURSE COORDINATORS

Contact information for all course coordinators is located in the syllabus for all courses; however, students are encouraged to pre-program their course coordinators office phone numbers into their cell phones or keep a list of course coordinator phone numbers where they are easily accessible. Students may contact the Office of the Dean (318-342-1600) or the Office of Student and Professional Affairs (318-342-3800) for assistance.

APPEALS FOR EXCUSED ABSENCES

In the event that a student disagrees with a Course Coordinator's decision concerning an excused absence, they may appeal that decision using the same pathway and timelines outlined for a grade appeal (Department Head, Associate Dean for Academic Affairs, Dean, Provost). Any appeal should include a copy of the validated excuse and a letter outlining reasons the excuse should be granted based on the SOP and University guidelines for excused absences. If the student has a University approved excuse for missing an examination or lab exercise, one opportunity will be given for make-up at the discretion of the instructor(s). Failure to attend a scheduled make-up will result in a grade of zero (0) for that exam/exercise. Make-up labs will be prepared at a similar level of difficulty and may be given as a written exam or an oral exam in the presence of another faculty member.

D. Academic Integrity: Faculty and students must observe the ULM published policy on Academic Dishonesty (see Page 4 of the ULM Student Policy Manual – <u>http://www.ulm.edu/studentpolicy/</u>). All professional students will adhere to the standards set forth in the School of Pharmacy's Code of Conduct (<u>http://www.ulm.edu/pharmacy/currents.html</u>).

E. Course Evaluation Policy: At minimum, students are expected to complete the on-line course evaluation as well as any evaluation administered in class by the College of Pharmacy.

F. Student Services: Information concerning student services in the School of Pharmacy can be found in the School of Pharmacy Student Handbook. In particular, pay special attention to the School's technical standards and policies concerning students with special needs (http://www.ulm.edu/studentpolicy/studentpolicy.pdf). ULM student services, such as Student Success Center (http://ulm.edu/cass/), Counseling Center (http://ulm.edu/counselingcenter/), and Student Health Services, is available at the following Student Services web site http://ulm.edu/studentaffairs/. Students with special needs requiring accommodations MUST process described follow the at http://rxweb.ulm.edu/pharmacy/student/specialneeds.pdf.

Mental Wellness on the ULM Campus

If you are having problems with emotional, social, and/or behavioral issues please call any of the mental health clinics on the ULM campus to make an appointment. All services are free to ULM students, staff, and faculty, and are strictly confidential.

- COP Office of Student and Professional Affairs: 342-3800
- ULM Counseling Center: 342-5220
- Marriage and Family Therapy Clinic: 342-5678
- Community Counseling Center: 342-1263
- ULM HELPS (Helping Educators and Learners Prevent Suicide) Project Office: 342-1335

The University of Louisiana at Monroe strives to serve students with special needs through compliance with Sections 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. These laws mandate that postsecondary institutions provide equal access to programs and services for students with disabilities without creating changes to the essential elements of the curriculum. While students with special needs are expected to meet our institution's academic standards, they are given the opportunity to fulfill learner outcomes in alternative ways. Examples of accommodations may include, but are not limited to, testing accommodations (oral testing, extended time for exams), interpreters, relocation of inaccessible classrooms, permission to audiotape lectures, note-taking assistance, and course substitutions.

Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity that receives federal funds, including federal loans and grants. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct, sexual violence, sexual harassment and retaliation. If you encounter unlawful sexual harassment or gender-based discrimination, please contact Student Services at 318-342-5230 or to file a complaint, visit <u>www.ulm.edu/titleix</u>.

- **G.** Fire Emergency Plan: Please review the emergency escape plan in the classrooms and hallways of the Bienville building. Move quickly and orderly to the appropriate stairwell and exit the building. The meeting place for this class will be the far end of the north parking lot between Bienville and Broadmoor Blvd. Under no circumstances is the elevator to be used for emergency evacuation. Any student needing assistance should notify the professor immediately. For emergencies, to contact University Police, call 1-911 from landlines and 342-5350 from cell phones.
- H. Cell Phone Policy: All cell phones should be turned off during class. If a student has a need to be notified during a an emergency situation during class, he should leave the telephone number of the Office of Student and Professional Affairs, 318-342-3800, with the person who may need to contact them emergently. Cell phones are not allowed in the classroom during examinations or quizzes. Students found to be in possession of a cell phone during an examination or quiz will be considered to have committed an act of academic dishonesty and will be charged and brought before the Committee on Ethical and Professional Conduct.
- I. Use of Prior Course Materials: Prior exams and prior quizzes are NOT permissible to possess and distribute to other students. Students who hand down prohibited course material are in violation of the policy and the Honor Code.

J. Laboratory Dress Code:

a. General Care

- i. Good personal hygiene
- ii. Hair maintenance neat and clean, styled off the face and out of the eyes. Hair longer than shoulder length should be secured. Hair bonnets will be worn when compounding.
- iii. Other
 Nails should be well groomed, manicured and of short to medium length to facilitate compounding activities. Tattoos must be covered by clothing. Jewelry in pierced noses, lips, tongues, or other exposed body areas, other than ears, is not permitted.

b. Attire

- i. Lab coat is <u>mandatory</u> in all practice labs
- ii. Clean professional styled clothing and shoes.
 - Shirts with a tail or a split should be tucked in.
 - Neckties are mandatory for all gentlemen.
 - Belts should be worn with all pants that have belt loops.
 - An undershirt should be worn if undergarments are visible through clothing.

- Skirts should be no shorter than one inch above the knee when sitting.
- No spaghetti straps, halter tops, tube tops, showing of middrift, low-cut tops or organization-branded jerseys.
- Scrub tops and bottoms <u>are</u> permitted according to school guidelines.
- Casual Friday attire is not permitted in practice labs.
- Dress Capri pants can be worn.
- Sandals, tennis shoes, and flip-flops are prohibited; closed toe or peep toe shoes are allowed.

c. Dress Code Violation

At the discretion of the laboratory instructor, half or all of the student's total daily lab points may be deducted for not wearing proper laboratory attire for any dress code infractions. If a student is constantly reminded to adhere to the current dress code policy, that student may be asked to leave the lab and notification will be sent to the dean of academic affairs by the lab instructor.

All policies in the ULM COP student handbook will be followed.

Due to present circumstances, ULM students, employees, and guests should continue to follow current CDC guidelines by requiring masking and social distancing in all classrooms and buildings throughout campus.

Everyone is encouraged to take advantage of frequent hand-washing, available hand sanitizer, masks, and testing opportunities.

As this is an ever-changing situation, please continue to monitor university communication. For more information click <u>here</u>.

PHRD 4049 ILS II 2024 Tentative Schedule

Week	(1:00 – 3:50 p.m. Tuesday & Thursd Topic	Assessment	Professor
1	PioneerRx Review/Pharmaceutical Compounding	Face to Face	Walker
1/15 – 1/19	Lab (PBNZ Paste)/ Drug Information Utilizing		
	Electronic Resources		
2	Compounding Lab (carbomer gel hand sanitizer/cold	Face to Face	Walker
1/22 - 1/26	cream)		
3	Professional Practice Lab #1	Face to Face	Walker
1/29 - 2/2	Community Pharmacy		
	Practice/Insurance/Adjudications		
4	PPCP Review/Case Study Exercise	Synchronous	Evans
2/5 - 2/9		Online	
		Drug Quiz #1	
5	Mardi Gras Holiday (Feb. 12 – 13)	No Lab	Walker
2/12 - 2/16			
6	Lollipop/Lip Balm/Calculations	Face to Face	
2/19 - 2/23		Drug Quiz #2	
7	Topic: Influenza (Compounding Emergency Tamiflu	Face to Face	Walker
2/26 - 3/1	Suspension/Patient Counseling Lab)	Drug Quiz #3	
8	Pharmaceutical Compounding Lab (Capsules &	Face to Face	G.Matthaiolampakis/
3/4 - 3/8	Suppositories)	Drug Quiz #4	Walker
9	Pharmacy Law Exercise/Counseling/Check Techs	Face to Face	Evans/Walker
3/11 - 3/15		Drug Quiz #5	
10	Pharmacy Adjudications; DUR, etc. Lab;	Face to Face	Walker
3/18 - 3/22	Professional Practice Lab #2 (Patient Counseling)	Drug Quiz #6	
11	SOAP Notes Review/P1 Level Case Study/SOAP	Synchronous	Evans
3/25 - 3/29	Notes Assignment	Online	
		Drug Quiz #7	
12	Spring Break (March 29 – April 5)	No Lab	
4/1 - 4/5			
13	Patient's Self Care / Vital Signs Lab	Face to Face	Sampognaro/
4/8 - 4/12		Drug Quiz #8	Walker
14	Introduction to Outcomes TM Software for	Asynchronous	Walker
4/15 - 4/19	documenting MTM	Online	
		Drug Quiz #9	
15	Phenergan PLO Gel Compounding	Face to Face	G.Matthaiolampakis/
4/22 - 4/26		Drug Quiz #10	Walker
16	Longitudinal Naplex Readiness Exam		Walker
4/29 - 5/3	Tuesday, April 30 at 1:00 p.m. B340		
17	Finals Week – No Labs	No Lab	
5/6 - 5/10			

(1:00 – 3:50 p.m. Tuesday & Thursday

(The instructor reserves the right to adjust the schedule as needed AND classroom and hours of class)