

ULM College of Pharmacy – Spring 2024
PHRD 4085: Therapeutics III -- Infectious Disease
CRN #:

I. **Contact Information** (*preferred method of communication)

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Guest Instructor:

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Ochsner Medical Center

II. Course Prerequisites / Corequisites:

Prerequisites: PHRD 4025, 4027, 4035, 4056

Corequisites: PHRD 4083, 4099

III. Textbook(s) and Materials

a. Required

- i. Chisholm-Burns MG, Wells BG, Schwinghammer TL. Pharmacotherapy Principles and Practice. 5th edition, New York, McGraw-Hill, Inc., 2019. ISBN-13: 978-1260019445 ISBN-10: 1260019446.
- ii. Brunton L, Lazo J, Parker K. Goodman and Gilman's: The Pharmacological Basis of Therapeutics, 13th Edition, McGraw-Hill, 2017.

b. Recommended

- i. Lemke TL, Williams DA, eds. Foye's Principles of Medicinal Chemistry, 8th ed., Lippincott Williams & Wilkins, 2019. ISBN 9781496385024
- ii. Dipiro JT, Talbert RL, Yee GC, et al. Pharmacotherapy: A pathophysiologic approach. 11th edition, New York, McGraw-Hill, Inc., December 2020. ISBN: 978-1-260-11681-6
- iii. Antibiotics Simplified, Jason C. Gallagher and Conan MacDougall, Jones & Bartlett Learning; 5th edition, July 2022, ISBN **978-1284250060**
- iv. Additional reading materials may be posted by course faculty

IV. Course Description

(6 cr.) Principles of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetics, and pharmacotherapy (including both prescription and non-prescription medications) as they apply to infectious diseases therapy management.

V. Curricular Objectives and Outcomes

Domain 1 – Foundational Knowledge

1.1 Learner (Learner) – Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.

Domain 2 – Essentials for Practice and Care

2.1. Patient-centered care (Caregiver) – Provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

Domain 3 – Approach to Practice and Care

3.1. Problem Solving (Problem Solver) – Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.

3.2. Educator (Educator) – Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.

3.3. Patient Advocacy (Advocate) - Assure that patients' best interests are represented.

Domain 4 – Personal and Professional Development

4.1. Self-awareness (Self-aware) – Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.

4.4. Professionalism (Professional) - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

Course Specific Objectives and Outcomes:

At the conclusion of this course students should be able to:

1. Demonstrate knowledge of the medicinal chemistry, pharmacological mechanism of action and related pharmaceutical topics of selected medications and medication classes used to treat endocrine disorders.
2. Identify appropriate non-pharmacologic therapy, based upon patient- and disease-specific information.
3. Develop appropriate pharmacotherapeutic regimens based upon patient- and disease-specific information.
4. Develop a plan for monitoring the pharmacotherapeutic regimen for efficacy, toxicity, and adverse effects.
5. Develop a plan for educating the patient regarding drug therapy.
6. Review a patient-specific drug therapy regimen and adjust as necessary.

Additional subject-area-associated objectives may be posted separately.

VI. **Course Topics**

This course will address the medicinal chemistry and pharmacology of antimicrobial agents and the pathophysiology, clinical presentation, epidemiology, and therapeutic management of common infectious disorders diseases. This will provide the core knowledge and skills required to formulate rational antimicrobial regimens for the treatment of common human infectious diseases.

VII. **Instructional Methods and Activities**

Instructional methods may include but are not limited to traditional PowerPoint lectures, internet-based lectures with in-class discussions, Poll Everywhere interactive questions, distance learning, web-based learning, in-class discussion of patient cases, small group discussion, problem-based learning, case-based learning, team-based learning, and individual projects. Participation in lectures using distance technology will be expected of all enrolled students. Technical resources used may include but are not limited to Zoom, Kaltura, ExamSoft, Moodle, Poll Everywhere, Kahoot, NearPod, etc. Quizzes or other graded in-class exercises may also be administered.

VIII. **Evaluation and Grade Assignment**

Examinations:

There will be four exams in this class. Three (3) exams during the semester and a non-comprehensive final exam that will take place during finals week

- Examination dates are scheduled in the course syllabus and will only be changed in the event of university closure.
- Examination questions may be multiple choice, fill in the blank, short-answer, case or scenario-based discussion, essay, or any other format deemed necessary by the lecturers and course coordinator.
- Information acquired from previous lectures in the course and from other courses in the professional pharmacy curriculum may be needed in preparing for these examinations.
- Examinations may cover material (readings, outside assignments) not covered in class.
- A post-test review will be conducted for each test in which the student will see a rationale for each missed question. The timing of this review will be at the discretion of the course coordinator.
- Examinations will NOT be returned to the student. A time when students can review their examinations will be scheduled within one week of grades being posted during a time when there are no other classes scheduled.

- Students wishing to review their examinations with the course coordinators or with a specific lecturer must do so within 2 weeks of when the test scores are posted, or within 1 week of the time that the score for the final examination is posted.

Challenging Exam Questions:

- Faculty members will review the exam scores and question statistics and will discuss amongst themselves any discrepancies within 48 hours of the test date.
- Problems or issues with a question should be first directed, via e-mail, to the question author. The course coordinators should be copied on this email, but it is the responsibility of the question's author to address the concerns. If the student is unsure which faculty member wrote a specific question, then he or she may ask the course coordinator. If a challenge comes from a student representative as a voice for one or a group of students, a list of all the students involved in the question challenge shall be included in the email with the references or rationale challenging any questions. The challenge will be reviewed by the faculty member, and his or her decision will be shared with the course coordinators. Discussion of a dispute will occur only after the written query is submitted. Challenges of test questions for the first 3 exams will only be considered within 2 weeks of when the test scores are posted. For the final examination, challenges of test questions will only be considered within 1 week of the time that the scores are posted.
- If there is an issue with a particular test question, adjustments to scores will be made based on discussions between the test question writer and the course coordinator.
- Individual test grades for the course will be strictly based upon the percentages below. There will be no curving or adjustments of grades except in the case of an incorrect question. If there is an issue with a particular test question, adjustments to scores will be made based on discussions between the test question writer and the course coordinator.

Quizzes, Assignments, and Team-Based Learning:

- Quizzes, assignments, and team-based learning (TBL) will be given as deemed necessary by each faculty member. These activities MAY OR MAY NOT be announced prior to the class period. The points available from these activities will make up 20% of the total course grade
- Students who submit activities late will receive a zero, non-passing, score for these items unless they have received written approval from the faculty member affiliated with the activity before the event occurs AND presents a verified excused absence within the timeframe stated in this syllabus.

Other:

- 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.
- Use of programmable calculators and electronic devices capable of storing, receiving, or transmitting data will not be allowed during quizzes or examinations. Such devices must be turned off and left with your belongings in the front of the room.
- Opportunities for bonus credit may be available as deemed appropriate by instructors. Any bonus credit will be included in the quizzes, assignments and TBL portion of the class

Examinations:

Exam #1	20% of overall grade
Exam #2	20% of overall grade
Exam #3	20% of overall grade
Exam #4	20% of overall grade
Quizzes, Assignments, and TBL	<u>20% of overall grade</u>
Total:	100% of overall grade

Grading Scale:

89.5 - 100%	A
79.5 - 89.49%	B
69.5 - 79.49%	C
59.5 - 69.49%	D
≤ 59.49%	F

Student Success Policy: <https://www.ulm.edu/pharmacy/currents.html>

Early Intervention Policy: <https://www.ulm.edu/pharmacy/currents.html>

Remediation Policy: <https://www.ulm.edu/pharmacy/currents.html>

IX. Class Policies and Procedures

At a minimum, all policies stated in the current ULM *Student Policy Manual & Organizational Handbook* (see <http://www.ulm.edu/studentpolicy/>) and the ULM *College of Pharmacy Student Handbook* (<https://www.ulm.edu/pharmacy/handbook/index.html>) should be followed. Additional class policies include:

a. Attendance Policy

Class attendance is required. 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: (1) may prevent access to the classroom during regularly scheduled times; (2) may jeopardize a student's scholastic standing; and (3) may lead to suspension from the college or University. Students shall submit excuses for all class absences to professor 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 this information to the faculty.
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.

b. Make-up Policy

If a student cannot attend an exam due to valid University excuse, he/she must speak directly with the course coordinator, as soon as possible. The course coordinator **must** be notified **prior** to an examination if a student misses an exam. The ULM COP Excused Absence Policy must be followed.

Please refer to the official document for details. In case of emergency, the course coordinator must be notified within 48 hours of the emergency. Failure to do so will result in a zero (0) grade for that exam. Make-up exams will be prepared at the same or higher level than the original exam. The format of the make-up exam may be written or oral. Failure to attend a scheduled make-up exam will result in a zero (0) grade for that exam. *Students missing an exam due to a University approved excuse will take the make-up exam during the week of finals, or at a time determined by the course coordinator.*

c. Academic Integrity:

- Faculty and students must observe the ULM published policy on Academic Dishonesty (ULM *Student Policy Manual* <http://www.ulm.edu/studentpolicy/>). At a minimum, all policies stated in the current [ULM Student Policy Manual & Organizational Handbook](https://www.ulm.edu/pharmacy/handbook/index.html) should be followed.

- All professional students will adhere to the standards set forth in the College of Pharmacy's Code of Conduct <https://www.ulm.edu/pharmacy/documents/ospa/codeofconduct040617.pdf>
- Cheating, plagiarism, or other inappropriate conduct will not be tolerated. Academic cheating includes but is not limited to the accomplishment or attempted accomplishment of the following:
 1. Copying or obtaining information from another student's test paper.*
 2. Using, during a test, materials not authorized by the person giving the test.**
 3. Collaborating, conspiring, or cooperating during an in-class or take-home test with any other person by giving or receiving information without authority.
 4. Stealing, buying, or otherwise obtaining all or part of an unadministered test.
 5. Selling or giving away all or part of an unadministered test or any information concerning specific questions and items on an unadministered test.
 6. Requesting, bribing, blackmailing, or in any other way causing any other person to obtain an unadministered test or information about an unadministered test or a test in the process of being administered.
 7. Substituting for another student or permitting any other person to substitute for oneself to take a test.
 8. Submitting as one's own, in fulfillment of academic requirements, any work prepared totally or in part by another person.
 9. Any selling, giving, or otherwise supplying to another student for use in fulfilling academic requirement any work.
 10. Submitting artificially produced data or information in the place of descriptive, experimental, or survey results.
 11. Any other devious means of securing an unearned grade in a non-credit course or in a course offered for credit.
 12. Using, during a test, any electronic storage device, wireless and/or internet-based technology, or any other means that provides information not authorized for use during the testing period.

*A student looking on another student's paper is considered cheating.

**The presence on one's person (or in close proximity thereto) of a condensation of test information which could be regarded as a "cheat sheet" will be considered adequate evidence to establish cheating.

Plagiarism is the use of any other person's work (such work need not be copyrighted) and the unacknowledged incorporation of that work in one's own work offered for credit.

d. Exam Policies:

- Only a writing instrument should be at your desk. All book bags and other bags should be left at the front of the room.
- Cell phones should be turned off and left with your belongings in the front of the room.
- Students will not be allowed to leave the room to go to the restroom during the exam, unless accompanied by a faculty member of the same sex, provided there is another proctor to remain in the room.
- For exams given using ExamSoft, computers used for the exam must remain in the classroom until the class period is over.
- Students who arrive to an exam after it has started will be sent to the OSPA and will not be given additional time to complete their exam. A warning will be issued and noted after the first offense. A grade of ZERO will be given for subsequent offenses. Arriving late disturbs fellow classmates and will not be tolerated.

Censures (Penalties)

Academic dishonesty will result in a referral to Committee on Ethical and Professional Standards with a recommendation for a grade of "F" for the course and expulsion from the College. Academic dishonesty

includes but is not limited to the use of information taken from others work or ideas, the provision of help to others on non-collaborative evaluations (tests, quizzes, etc.), collaboration on take home exams, or the use of unapproved information or electronic devices to assist in obtaining an answer to the question.

e. **Course Evaluation Policy:**

Students are expected to complete the on-line course evaluation. It is requested that they also complete the College of Pharmacy course and instructor evaluations, including providing comments. In addition, individual feedback is encouraged throughout the course.

f. **Student Services**

Information concerning student services in the College of Pharmacy can be found in the College of Pharmacy Student Handbook. In particular, students should pay special attention to the Colleges technical standards and policies concerning students with special needs (<http://ulm.edu/counselingcenter/special.htm>). 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/>. 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 www.ulm.edu/titleix.

g. **Emergency Procedures**

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. **Discipline/Course Specific Policies**

Students are responsible for all course information on Moodle and/or instructor websites. They are expected to check these sources regularly to access class materials, required readings, assignments, and other information necessary to excel in this course.

i. **Communication with Coordinators and Course Faculty**

- Open and frequent communication via email, phone, or face-to-face is highly encouraged. Your comments and suggestions can and will be used to improve this and future offerings of this course.
- If you feel that you are having problems in the course, please approach and discuss with the appropriate faculty member(s) as early as possible, to avoid complications later in the course that could impact your understanding of the material or your grade in the course.
- Per College of Pharmacy policy, concerns, comments, and suggestions should be discussed/submitted first to the individual faculty member to which they pertain (or to the Course Coordinators, if the concern is with the course as a whole). If not satisfactorily addressed, then that instructor's School Director should be contacted, followed by the Associate Dean of Academic Affairs. Following this communication "chain" is important to allow for appropriate resolution of issues and continuous quality improvement, and to maintain the desired professional relationship between students and faculty.
- This is an integrated course covering a number of topics from different viewpoints. If two (or more) faculty members present what appears to be conflicting information, it is important to question that information and discuss it with the faculty member(s) involved. The appropriate time to do this is prior to the exam covering that material.
- Upon necessity and in accordance with the University and College policies and procedures, the Course Coordinators reserve the right to adjust the syllabus or schedule in a reasonable fashion and without compromising the course integrity.

j. **Physical Location Verification**

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 (https://ssbprod.ec.ulm.edu/PROD/bwggkogad.P_SelectAtypUpdate) Students should do this by the end of the first week of classes.

- k. *This course is a major requirement for the PHARM.D. degree in the College of 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 (<https://www.ulm.edu/professional-licensure-disclosures/index.html>) 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.*