I. Contact Information

Course Coordinators:
Jessica Brady, PharmD, BCPS
Bienville 115
brady@ulm.edu (preferred method of contact)
318-342-1697
Office hours: Monday – Thursday 1:00 – 4:00

Shawn Manor, PharmD, BCPS
Shreveport Campus
manor@ulm.edu (preferred method of contact)
318-632-2007 ext. 230
Office hours: Monday – Thursday 8:00 – 9:00 and 1:00 – 2:00

Course Instructors:
Yong-Yu Liu, PhD, MD
Bienville 368
yliu@ulm.edu (preferred method of contact)
318-342-1709
Office hours: Monday – Friday 8:00 – 10:00

Khalid El Sayed, PhD
Bienville 324
elsayed@ulm.edu (preferred method of contact)
318-342-1725
Office hours: Monday – Thursday 10:00 – 1:00

Sami Nazzal, PhD
Bienville 378
nazzal@ulm.edu
318-342-1726 (preferred method of contact)
Office hours: Monday – Thursday 3:00 – 5:00, Friday by appointment

Kristen Pate, PharmD, BCACP
Bienville 109
kpate@ulm.edu (preferred method of contact)
318-342-1904
Office hours: Tuesday 8:00 – 11:00, Wednesday 2:00 – 4:00, Thursday 1:00 – 4:00, Friday 9:00 – 11:00

Laurel Sampognaro, PharmD
Bienville 119
landrews@ulm.edu (preferred method of contact)
318-342-1721
Office hours: Monday and Friday 8:00 – 10:00; Tuesday – Thursday 2:00 – 4:00
II. Course Prerequisites/Corequisites
Prerequisites: Completion of PHRD 4058 Neurology/Psychiatry Module, PHRD 4074 Endocrinology Module, and PHRD 4081 Infectious Diseases Module with a grade of “C” or better.

III. Course Description
Principles of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetics and pharmacotherapy (including both prescription and nonprescription medications) as they apply to respiratory drug therapy management. 2 credit hours.

IV. Curricular Objectives and Outcomes
Provide Comprehensive Patient Specific Pharmaceutical Care
1. Evaluate the appropriateness of a given prescription or medication order based on patient and disease-specific factors.
3. Develop and implement an evidence-based care plan. (pharmacology, medicinal chemistry, physiology, pathology, etc.)
5. Document all activities involved with the provision of comprehensive patient specific pharmaceutical care.

Communicate Effectively
6. Counsel and educate patients regarding medication use, disease-state management, and health maintenance.
8. Collaborate with other healthcare professionals using appropriate effective communication in both written and oral forms.

Identify, Interpret, and Evaluate Literature Needed for the Provision of Drug Information and Pharmaceutical Care
13. Define the question that needs to be answered.
14. Distinguish among lay, professional, and scientific literature.
15. Identify appropriate literature search engines for lay, professional and scientific literature.
16. Explain the method to construct an appropriate search strategy for various literature types.
17. Evaluate literature source validity.
18. Explain methods for systematically evaluating literature.
19. Evaluate the appropriateness of research methodologies and statistical methods.
20. Draw appropriate conclusions from research results.
21. Assess the potential impact and implication of published information on current practices.

Think Critically
24. Identify, retrieve, understand, analyze, synthesize, and evaluate information needed to make informed, rational, and ethical decisions.
25. Solve complex problems that require an integration of one's ideas and values within a context of scientific, social, cultural, legal, clinical, and ethical issues.
26. Display habits, attitudes, and values associated with mature critical thinking.

Demonstrate Appropriate Interpersonal, Professional, and Ethical Behaviors
27. Maintain professional competence.
28. Represent the profession in an ethical manner.
29. Identify, analyze, and resolve ethical problems involved in pharmacy practice.
30. Provide service to the profession and the community.
31. Collaborate proactively with other health care professionals.
32. Practice in a manner that is consistent with state and federal laws and regulations.
33. Accept the responsibilities embodied in the principles of pharmaceutical care.
34. Demonstrate appropriate interpersonal, intergroup, and cross-cultural behaviors that promote respect and trust from peers, patients, and community members.

V. Course Specific Objectives and Outcomes
• For the disease states covered, the students should practice and refine the following abilities:
  o Recommend appropriate non-pharmacologic therapy based upon patient- and disease specific information.
    ▪ Identify appropriate patients to benefit from non-pharmacologic therapy.
    ▪ Non-pharmacologic therapy recommendations are based on patient-specific information (age, weight, height, lifestyle, occupation, etc).
    ▪ Non-pharmacologic therapy recommendations are based on disease-specific information (pathophysiology, disease severity).
  o Recommend pharmacotherapeutic regimens based upon patient-, disease-, and drug specific information.
    ▪ Identify correct drug, dose, route, frequency and duration.
    ▪ Drug dose, route, and frequency are justified based on drug-specific data (pharmacology, pharmacokinetics, pharmacodynamics, medicinal chemistry).
    ▪ Drug dose, route, frequency and duration are based on patient-specific data (age, weight, renal function, hepatic function, history, signs and symptoms).
    ▪ Drug dose, route, frequency and duration are based on disease-state specific data (pathophysiology, disease severity).
    ▪ Recommendations include identifying endpoints for treatment based on the history of the underlying disease, desired clinical endpoints, and/or standard guidelines for therapy.
    ▪ If recommending IV therapy, an endpoint for IV therapy and guidelines for switching from IV to oral therapy (or other route) are provided.
  o Monitor pharmacotherapy for efficacy, toxicity, and adverse events.
    ▪ Monitoring parameters take into account drug specific data (pharmacology, medicinal chemistry, pharmacokinetics, pharmacodynamics).
    ▪ Monitoring parameters take into account patient-specific data (age, weight, renal function, hepatic function, history, signs and symptoms).
    ▪ Monitoring parameters take into account disease specific data (pathophysiology, disease severity).
    ▪ Identify pertinent subjective and objective parameters for efficacy.
- Identify pertinent subjective and objective parameters for toxicity/adverse effects.
- Establish intervals and frequencies for monitoring (e.g., check temperature twice daily, measure intake and output every 8 hours).
- Identify potential drug interactions and monitors accordingly.
  - Provide education regarding the appropriate use of medications.
  - Evaluate the appropriateness of patient-specific therapy and modify therapy as needed.

VI. Course Topics
Topics to be covered in this module include respiratory system pathophysiology, pharmacology, medicinal chemistry, and drug delivery. Therapeutics topics include cystic fibrosis, pulmonary hypertension, tuberculosis, asthma, theophylline concepts, chronic obstructive pulmonary disease, and smoking cessation.

VII. Instructional Methods and Activities
Instructional methods may include traditional lectures, internet-based lectures with in-class discussion, distance learning, in-class discussion of patient cases, small group discussion, problem-based learning, case-based learning, demonstration of various devices, and individual projects. Quizzes and/or graded assignments may also be administered.

VIII. Evaluation and Grade Assignment
Exams may consist of any combination of multiple choice, true/false, short answer, and clinical situations as determined by the instructor, administered in electronic format by use of ExamSoft. Each student will be required to present to the exam with a working computer on which the exam has been downloaded. Scratch paper will be provided and must be returned prior to exiting the classroom following the exam.

- The exam will be made available in a time such that students will be able to download the exam PRIOR to the test time. Students will not be given extra time to take the exam to allow for the downloading of the test document.
- Students must upload the exam in a timely fashion. Failure to do so will result in a zero on that exam. In the event of an internet issue, students who have an issue uploading the exam will contact the course coordinators immediately and it will be addressed at the discretion of the coordinators.

Each lecture will be worth 10 points.

Students wishing to review their exams 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 exam is posted.

Problems or issues with question(s) should be first directed, via e-mail, to the instructor who wrote it. The course coordinator(s) should be copied on this email, but it is the responsibility of the instructor to address the concern(s). (If the student is unsure which instructor wrote a specific question, then he or she may ask the course coordinator.) The student is expected to include references or rationale to support their challenge of the question in writing. The challenge will be reviewed by the instructor, and his or her decision will be shared with the course coordinator(s). Discussion of a dispute will occur only after a written query is submitted, with reasoning for the challenge.

After the exams have been graded and an item analysis performed, questions may be discarded or otherwise adjusted at the discretion of the Course Coordinators, in consultation with the faculty on that exam, before arriving at final grades. When, due to faculty concerns regarding a question appearing on an administered examination, or as the result of a student-generated appeal that is judged to be valid and of merit by course faculty and/or coordinators, the question will generally be omitted from the grade calculation for all students – the total points for the course grade will be reduced. Course coordinators reserve the right to deviate from this general guideline,
however, according to their professional judgment as it pertains to the specifics of the issue with the question deemed to be flawed.

Exam 1  90 pts
Exam 2  80 pts
Exam 3  90 pts
Assignments/ quizzes  TBD

Grading Scale:
89.5 – 100%  A
79.5 – 89.49%  B
69.5 – 79.49%  C
59.5 – 69.49%  D
≤59.49%  F

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.

Undergraduate mid-term grades will be posted online 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.

IX. Class Policies and Procedures
At a minimum, all policies stated in the current ULM Student Policy Manual & Organizational Handbook should be followed (see http://www.ulm.edu/studentpolicy/). Additional class policies include:

A. Textbook(s) and Materials:
Required:
Recommended:

Additional REQUIRED and/or recommended reading materials may be posted on Moodle by course faculty.

B. 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.

C. Make-up Policy:
If the student cannot attend an exam, ADVANCE NOTICE MUST BE GIVEN to the course coordinator(s). If a student cannot contact the Course Coordinator prior to the graded exercise, they must contact the coordinator within 24 hours of the graded exercise. Excused make-ups will be within one week of the student’s return to class at the convenience of the coordinator(s). Excused absences will be determined using the guidelines stated in the University Catalog. Failure to attend a scheduled make-up will result in a grade of zero (0) for that exam. Make-up exams and/or assignments may be of any format agreed to by faculty members involved with the course and the course coordinator(s).

D. Academic Integrity: Faculty and students must observe the ULM published policy on Academic Dishonesty (See the ULM Student Policy Manual –http://www.ulm.edu/studentpolicy/). All professional students will adhere to the standards set forth in the College of Pharmacy’s Code of Conduct. http://www.ulm.edu/pharmacy/documents/ospa/codeofconductv82011.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:

• Copying or obtaining information from another student's test paper/computer.*
• Using, during a test, materials not authorized by the person giving the test.**
• Collaborating, conspiring, or cooperating during an in-class or take-home test with any other person by giving or receiving information without authority.
• Stealing, buying, or otherwise obtaining all or part of an unadministered test.
• Selling or giving away all or part of an unadministered test or any information concerning specific questions and items on an unadministered test.
• 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.
• Substituting for another student, or permitting any other person to substitute for oneself to take a test.
• Submitting as one's own, in fulfillment of academic requirements, any work prepared totally or in part by another person.
• Any selling, giving, or otherwise supplying to another student for use in fulfilling academic requirement any work.
• Submitting artificially produced data or information in the place of descriptive, experimental, or survey results.
• Any other devious means of securing an unearned grade in a non-credit course or in a course offered for credit.
• 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/computer 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.

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. Early Intervention Policy: Students scoring <70% on any exam and an overall exam average <70% (excludes quizzes, assignments, bonus, etc.) will be required to submit to the coordinator written, narrative responses to select lecture objectives that will be provided within 24 hours of the posting of their exam grade to Moodle. These objectives will be in the form of a Moodle assignment and represent unit- or lecture-level objectives to be tested upon in the next scheduled course exam.

Written responses must be submitted no later than one calendar week before the next scheduled exam. Responses must be written in complete sentences and may not be copied or pasted from any source, including class notes, treatment guidelines, textbooks, or any internet site. Submissions found to contain responses that have not been written in a student’s own words will be considered a failure to submit.

In addition, students will be required to review each failed exam’s ExamSoft-generated missed item report with the instructor responsible for each section of material. The discussion should include the student’s reasoning for the incorrect answer as well as the reason for the correct answer.

Failure to submit this required assignment will result in ineligibility to remediate.

F. Remediation Policy: Remediation is a privilege that must be earned through demonstrated attendance and active participation throughout the semester that the non-progressing grade was earned. To be eligible for remediation, the student must have demonstrated regular attendance, completed all assigned work in the course and utilized other academic resources such as tutoring and meetings with the instructor.

Remediation will be offered to any student earning a course average of ≥65% regardless of the total number of students failing. If ≥7% of the enrolled students fail to earn a grade of “C” or better in a required course, then remediation will be allowed for any student earning a final non-progressing grade of “D” or “F” for the course. Those who choose remediation will be given an incomplete (“I”) until the time that remediation is finished.

Students choosing remediation must make a score of ≥70% on the targeted remediation exam to pass and receive a final grade of “C” in the course. No grade higher than a “C” can be made in the course with remediation. If the student makes a grade of <70% on the targeted final, their original grade will take the place of the “I” grade. The student can then re-enroll in the course at the next offering if eligible based on school progression policies. If this is the student’s second “F” grade in the curriculum, the student will be dismissed from the program.

Students will be allowed to remediate with a targeted remediation exam no more than three (3) times total in their P1-P3 years. Students may not remediate a class more than once. There will be no make-up exams in the remediation.

Students with a grade of “C” or better are not eligible to use remediation in an attempt to improve their grade in that course.
Students receiving a non-progressing grade as a result of a disciplinary action are not eligible to remediate that course in that semester.

G. Course Evaluation Policy: At a minimum, students are expected to complete the on-line course evaluation. It is requested that students also complete the College of Pharmacy course and instructor evaluations, including providing comments.

H. 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://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/.

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.

I. 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.
J. Discipline/Course Specific Policies:
Students are responsible for all information on Moodle® and/or instructor websites. Students are expected to check these sources regularly to access class materials, required readings, assignments, and other information necessary for this course.
### X. Tentative Course Schedule

*(The coordinator/instructor reserves the right to adjust the schedule as needed.)*

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Day</th>
<th>Date</th>
<th>PHRD 5031: Respiratory Module</th>
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<tr>
<td></td>
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<td></td>
<td>Bienville 170</td>
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<td>Tuesday, Thursday 11-11:50 am</td>
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<tr>
<th>Topic</th>
<th>Instructor</th>
<th>Pts on Exam/Due Date</th>
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<tbody>
<tr>
<td>Respiratory Pathophysiology</td>
<td>Liu</td>
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<tr>
<td>Respiratory Pharmacology</td>
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<td>Respiratory Medicinal Chemistry</td>
<td>El Sayed</td>
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<td>Pulmonary Drug Delivery</td>
<td>Nazzal</td>
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<tr>
<td>Asthma</td>
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<td>Mardi Gras Holiday</td>
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<td>Asthma</td>
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<td>Theophylline</td>
<td>Manor</td>
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<td>Cystic Fibrosis</td>
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<tr>
<td>Pharmacology- PAH</td>
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