PHRD 4035: Pathophysiology II

I. Contact Information

Instructor of Record: Keith Jackson, Ph.D.
Associate Professor, Dept of Basic Pharmaceutical Sciences
Office: 370 Bienville
Phone: 318-342-1390
Email: kjackson@ulm.edu
Office Hours: 8-10 M-Th & By Appointment

Instructors:

Yong-Yu Liu, Ph.D.
Associate Professor, Dept of Basic Pharmaceutical Sciences
Office: 368 Bienville
Phone: 342-1709
Email: yliu@ulm.edu
Office Hours: 11am-1pm Mon-Thur, & By Appointment

Paul W. Sylvester, Ph.D.
Professor, Dept of Basic Pharmaceutical Sciences
Office: 344 Bienville
Phone: 318-342-1958
Email: sylvester@ulm.edu
Office Hours: 11am-1pm Mon-Thur, 8-10 Fri

II. Course Prerequisites/Corequisites

PHRD 4012

III. Course Description

Students will be introduced to disease processes at the organ/system level. This course will serve as an extension to pathophysiology I as complete organ systems are introduced and the impact of diseases on these systems is studied.

IV. Course Objectives and Outcomes (selected from a total of 34)

a. 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.

b. 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.

The constant objective for the course is to introduce the student to basic principles of the ways that medications work in the body. Additionally some time will be spent introducing how to select certain medications for certain patients. At the end of this course, the student should be able to: Predict physiological reactions to numerous challenges at a cellular, organ, and system level; utilize information to explain the pathological basis of disease.
V. Course Topics
Pathophysiology and pharmacology of cardiovascular disorders, pulmonary disease, digestive system diseases, renal and urinary disorders, endocrine disorders, reproductive system diseases, integumentary system disorders and multiple organ systems dysfunction.

VI. Instructional Methods and Activities
Instructional methods may include: traditional lectures, in-class discussion of patient cases, small group discussions, problem-based learning, case-based learning, and individual projects or assignments.

VII. Evaluation and Grade Assignment

A. There will be 3 midterm exams (110, 120, 100 points each) and a final exam (50 points). The final exam will not be comprehensive and will cover only the material presented after the 3rd midterm exam.

B. Quizzes/assignments will be given as deemed necessary by each faculty member. Quiz grades may be added to the overall grade at a percentage of 10% of the final grade.

C. Exam dates are scheduled in the course syllabus and will only be changed in the event of University closure.

D. Exams 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.

E. Normal laboratory values will be provided for all questions, unless otherwise specified during class.

F. Lab values that are specific to a particular disease state will not be provided.

G. 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.

H. Exams may cover material (readings, outside assignments) not covered in class. Additional reading assignments will be assigned prior to the examination.

I. Exams will NOT be returned to the student. Review sessions may be scheduled for students to review the exam with the test question writer. Also, the test question writer may post an exam key and/or explanation of correct answers to Moodle. Format for review of test questions are to be determined by the test question writer and completed within 2 weeks of the exam date.

J. Use of programmable calculators will not be allowed during quizzes or exams.

K. Students wishing to review their exams with the course coordinator or with a specific lecturer must do so within 2 weeks of when the test scores are posted.

L. Students wishing to challenge a question on the test must provide the course coordinator with a written statement that identifies which question(s) being challenged, why the student feels his or her answer(s) is/are correct and references from recent (published within the last 1-2 years) primary or tertiary literature to support the claim. Problems or issues with question(s) should be first directed, via e-mail, to the faculty member who presented to material. The course coordinator should be copied on this communication. In the event that the faculty member and the student cannot arrive at an acceptable conclusion, the course coordinator should be contacted regarding the issue. Discussion of a dispute will occur only after a written query is submitted. Challenges of test questions will only be considered within 2 weeks of when the test scores are posted.

M. In the event that 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.

N. Exams will be issued using Exam Soft; all students are required to download the exams prior to the date of the scheduled exam. In the event that a student cannot take the exam on the scheduled date the student must reverse download the exam to Exam Soft. Under no circumstances should a student open an examination, except during the scheduled time and at the scheduled location. Scratch paper will be issued on the day of the exam and all students are required to sign the scratch paper and return it to the exam proctor prior to leaving the room. No other paper items will be allowed during the exam unless supplied by the faculty administering the exam. All exams must be uploaded before leaving the classroom; in the event of a power outage or loss of Wi-Fi connection all students are required to upload the exam at the earliest possible reconnection time, however proof of exam closeout will be required prior to leaving the classroom.

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examinations</td>
<td></td>
</tr>
<tr>
<td>Exam #1</td>
<td>110</td>
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</tbody>
</table>
Exam #2 120
Exam #3 100
Final Exam 50
Total class points: 380

Grading Scale:
90 – 100%   A
80 – 89.9%   B
70 – 79.9%   C
60 – 69.9%   D
≤ 59.9%      F

VIII. Class Policies and Procedures

A. Textbooks (required):


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: (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 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 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: Each student is expected to attend each exam at the date and time specified. 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 the examination if a student misses the exam, if possible. Failure to attend a scheduled make-up exam 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. *Students missing an exam due to a University approved excuse will take the make-up exam during the week of finals, or as determined by the course coordinator.*


E. Course Evaluation Policy: At a 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 about ULM student services, such as Student Success Center ([http://ulm.edu/cass/](http://ulm.edu/cass/)), Counseling Center ([http://ulm.edu/counselingcenter/](http://ulm.edu/counselingcenter/)), Special Needs ([http://ulm.edu/counselingcenter/special.htm](http://ulm.edu/counselingcenter/special.htm)) and Student Health Services, is available at the following Student Services web site [http://ulm.edu/studentaffairs/](http://ulm.edu/studentaffairs/).
G. Fire Emergency Plan: Please check the emergency escape plan by the door of the classroom. Move quickly and orderly to the appropriate stair well and exit outside the building. Under no circumstance is the elevator to be used for emergency fire evacuation. Any student needing assistance with the stairs should notify the professor.

The course coordinator reserves the right to adjust the syllabus or schedule, in accordance with University and College policies and procedures.
### IX. Course Schedule PHRD 4035 Pathophysiology II

*Class will meet in Bienville 340 Monday, Wednesday and Friday at 10:00~10:50am*

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Instructor</th>
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</thead>
<tbody>
<tr>
<td>1. W, Jan. 20</td>
<td>Structure and function of the cardiovascular system</td>
<td>Jackson</td>
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<tr>
<td>2. F, Jan. 22</td>
<td>Structure and function of the cardiovascular system</td>
<td>Jackson</td>
</tr>
<tr>
<td>4. W, Jan. 27</td>
<td>Alterations of cardiovascular function</td>
<td>Jackson</td>
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<tr>
<td>5. F, Jan. 29</td>
<td>Alterations of cardiovascular function</td>
<td>Jackson</td>
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<tr>
<td>6. M, Feb. 1</td>
<td>Alterations of cardiovascular function in children</td>
<td>Jackson</td>
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<tr>
<td>7. W, Feb. 3</td>
<td>Structure and function of the pulmonary system</td>
<td>Liu</td>
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<tr>
<td>8. F, Feb. 5</td>
<td>Alterations of pulmonary function</td>
<td>Liu</td>
</tr>
<tr>
<td><strong>M, Feb. 8</strong></td>
<td><strong>Mardi Gras Holiday</strong></td>
<td><strong>Liu</strong></td>
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<tr>
<td><strong>W, Feb. 10</strong></td>
<td><strong>Mardi Gras Holiday</strong></td>
<td><strong>Liu</strong></td>
</tr>
<tr>
<td>10. M, Feb. 15</td>
<td>Alterations of pulmonary function</td>
<td>Liu</td>
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<tr>
<td>12. F, Feb. 19</td>
<td>Structure and function of the digestive system</td>
<td>Liu</td>
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<tr>
<td><strong>M, Feb. 22</strong></td>
<td><strong>Examination One – Jan 20 – Feb 17 (110 points)</strong></td>
<td><strong>Liu</strong></td>
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<tr>
<td>13. W, Feb. 24</td>
<td>Alterations of digestive function</td>
<td>Liu</td>
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<tr>
<td>14. F, Feb. 26</td>
<td>Alterations of digestive function</td>
<td>Liu</td>
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<tr>
<td>15. M, Feb. 29</td>
<td>Alterations of digestive function</td>
<td>Liu</td>
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<tr>
<td>16. W, Mar. 2</td>
<td>Alterations of digestive function</td>
<td>Liu</td>
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<tr>
<td>17. F, Mar. 4</td>
<td>Alterations of digestive function in children</td>
<td>Liu</td>
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<tr>
<td>18. M, Mar. 7</td>
<td>Structure and function of the renal and urologic systems</td>
<td>Jackson</td>
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<tr>
<td>19. W, Mar. 9</td>
<td>Alterations of renal and urinary tract function</td>
<td>Jackson</td>
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<tr>
<td>20. F, Mar. 11</td>
<td>Alterations of renal and urinary tract function</td>
<td>Jackson</td>
</tr>
<tr>
<td>22. W, Mar. 16</td>
<td>Alterations of renal and urinary tract function</td>
<td>Jackson</td>
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<tr>
<td>23. F, Mar. 18</td>
<td>Alterations of renal/urinary tract function in children</td>
<td>Jackson</td>
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<tr>
<td><strong>W, Mar. 23</strong></td>
<td><strong>Examination Two – Feb 19 – Mar 18 (120 points)</strong></td>
<td><strong>Sylvester</strong></td>
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<tr>
<td>25. F, Mar. 25</td>
<td>Spring Holiday</td>
<td>Liu</td>
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<tr>
<td>26. M, Mar. 28</td>
<td>Spring Holiday</td>
<td>Liu</td>
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<tr>
<td><strong>W, Mar. 30</strong></td>
<td><strong>Spring Holiday</strong></td>
<td><strong>Sylvester</strong></td>
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<tr>
<td>27. F, Apr. 1</td>
<td>Spring Holiday</td>
<td>Sylvester</td>
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<tr>
<td>28. M, Apr. 4</td>
<td>Alterations of endocrine regulation</td>
<td>Sylvester</td>
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<tr>
<td>29. W, Apr. 6</td>
<td>Alterations of endocrine regulation</td>
<td>Sylvester</td>
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<tr>
<td>30. F, Apr. 8</td>
<td>Alterations of endocrine regulation</td>
<td>Sylvester</td>
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<tr>
<td>31. M, Apr. 11</td>
<td>Alterations of endocrine regulation</td>
<td>Sylvester</td>
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<tr>
<td><strong>W, Apr. 27</strong></td>
<td><strong>Examination Three – Mar 21 – Apr 22 (100 points)</strong></td>
<td><strong>Liu</strong></td>
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<tr>
<td>32. W, Apr. 13</td>
<td>Structure and function of the reproductive systems</td>
<td>Liu</td>
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<tr>
<td>33. F, Apr. 15</td>
<td>Alterations of the reproductive systems</td>
<td>Liu</td>
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<tr>
<td>34. M, Apr. 18</td>
<td>Alterations of the reproductive systems</td>
<td>Liu</td>
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<tr>
<td>35. W, Apr. 20</td>
<td>Alterations of the reproductive systems</td>
<td>Liu</td>
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<tr>
<td>36. F, Apr. 22</td>
<td>Sexually transmitted infections</td>
<td>Liu</td>
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<tr>
<td>37. M, Apr. 25</td>
<td>Structure, Function and Disorders of the Integument; Ch. 46</td>
<td>Liu</td>
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Final Exam Week
Exam will cover material presented from 04/25/2016 through 05/06/16. The Final Exam (50 points) is not comprehensive.