

Integrated Pharmacotherapy 1 (Ptx-1)
Renal/Respiratory
PHAR 7481
Fall Semester 2021

Course Description

This course focuses on the application of the knowledge and skills needed for pharmacists to care for patients with various renal and respiratory disorders.

Additional Information on the Course

This course incorporates advanced renal and respiratory pathophysiology and pharmacology in order to prepare students to focus on the pharmacotherapeutics of the renal and respiratory systems and common diseases affecting those systems. Development of patient-specific therapeutic plans using non-prescription, prescription and nonpharmacological modalities will be learned. Ultimately, students will be provided with the knowledge and skills necessary to provide care to patients with renal and respiratory disorders.

Course Credit

4 credit hours

Pre-Requisites

PHAR 7301, PHAR 7613, PHAR 7203

Co-Requisites

None

Class Meeting Days, Time & Location

Monday and Tuesday, 2:00 pm – 4:00 pm; W.T. Brookshire Hall room # 136

Course Coordinator

Rebecca Dunn, Pharm.D., BCPS

W.T. Brookshire Hall Room 237

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Email: rdunn@uttyler.edu

Office hours: TBD (see Canvas course site)

Preferred method of contact: Email

Fisch College of Pharmacy (FCOP) and UT Tyler Policies

This is part 1 of the syllabus. Part 2 contains UT Tyler and the FCOP course policies and procedures. These are available as a PDF at <https://www.uttyler.edu/pharmacy/academic-affairs/>. For experiential courses (i.e., IPPE and/or APPE), the Experiential Manual contains additional policies and instructions that supplement the Syllabus Part 1 and 2. Please note, the experiential manual may contain policies with different deadlines and/or instructions. The manual should be followed in these cases.

Required Materials

Most course required materials are available through the Robert R. Muntz Library. These materials are available either online (<http://library.utttyler.edu/>) or on reserve.

1. Pharmacotherapy: A Pathophysiologic Approach, 10th Edition. DiPiro JT, Talbert RL, Yee GC, et al. McGraw-Hill Education. (©2017) ISBN 978-1-259-58748-1
2. Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy Fourth Edition, 4th Edition. Golan DE, Armstrong EJ, Armstrong AW. Wolters Kluwer. (©2017) ISBN 9781451191004
3. Renal Pathophysiology, 4th Edition. Rennke H, Bradley M, Denker BM. Lippincott Williams & Wilkins. ISBN-13: 978-1451173383
4. Other required materials will be posted on the classes' Canvas site. The site address is: utttyler.edu/canvas.

Recommended Materials

None

Course Format

The course may include, but is not limited to, the following activities:

1. Independent study of selected readings
2. Individual readiness assessment tests (iRATs)
3. Team-based learning, active learning strategies:
 - a. Team readiness assessments (tRAT)
 - b. Team application of content and concepts
 - c. Team presentation of content and concepts
 - d. Team project(s)
 - e. SOAP note(s)
4. Lecture
5. Active learning
6. **Case studies** (see below)
7. Educational video clips (online and in class)
8. Independent preparation of reflection papers

Course Learning Outcomes (CLOs)

CLOs	PLO(s) Assessed for this CLO	EPAs	Assessment Methods	Grading Method	PPCP Skill(s) Assessed	ACPE Std. 11 & 12
1. Select appropriate medication therapy for renal and respiratory conditions based on principles of physiology, pathophysiology and pharmacology.	1, 2	1.1 1.2	1	ES	1, 2, 3	4
2. Formulate patient-and disease-specific care plans for pharmacotherapeutic regimens in renal and respiratory disorders.	1, 2, 4	1.1 1.2 1.3 1.4 4.2	1	ES	1, 2, 3, 4	4
3. Design monitoring plans for efficacy, toxicity and adverse effects for pharmacotherapeutic regimens in renal and respiratory disorders.	1, 2, 6	1.5 3.2	1	ES	3, 4, 5	4

Course Assessment Methods

	Assessment Method	Description <i>Please provide a brief description of each summative assessment that you plan to use in this course to allow us to identify which ACPE standards are being assessed</i>
1	Final Exam Multiple Choice or Multiple Selection Question(s)	<i>Standard MCQ and Select All that apply questions.</i>
2	Final Exam Open Ended Question(s)	<i>FITB, short answer, essay</i>

Grading Policy & Grade Calculation

Grades will be determined based on evaluation of individual and team readiness assessment tests (iRATs, tRATs), individual and team cumulative assessment tests (iCATs, tCATs), quizzes, midterm examinations, final written examinations, skills assessments, graded application assignments, participation in team-based projects, peer evaluations and other assessment methods. Examinations, RATs and CATs may consist of, but not limited to, multiple-choice, true/false, fill in the blank, short-answer, essay, and problem-based questions. **Backwards navigation will not be available on summative assessments (e.g. midterms, final).**

All examinations, tests, and assignments, including the final examination, may be **cumulative**. Students are responsible for material presented during the prior courses. The grading scale for all graded material is below. The final course grade will be assigned according to the calculated percentage and the **percentages will not be rounded upward or downward**. For additional information, see examination/assessment policy below.

During the time the course is in progress, students whose cumulative course percentage falls below 70.0% may receive an academic alert and be subject to periodic course content review in special sessions with the course instructor(s). The student's faculty advisor may receive an academic alert to act upon on the student's behalf.

Standard Grade Calculation	
Individual Component	95%
iRATs/quizzes	15%
Midterm 1	25%
Midterm 2	25%
Final Exam	30%
Team Component	5%
tRATs	2.5%
Applications/Team Projects	2.5%
Total	100%

*****Failure to attend the Case Studies session assigned to this course will result in an 2% deduction from your final course grade*****

The final course letter grade will be determined according to the following grading scheme:

A	90 - 100 %
B	80 - 89.999 %
C	70 - 79.999 %
D	65.0 - 69.999 %
F	< 65.0 %

Case Studies

Case Studies is a longitudinal supplement intended to reinforce and integrate concepts and skills from the P2 fall curriculum. **Content and concepts from Case Studies will be integrated into summative exams for the P2 fall courses.**

Case Studies Format

Case days may include, but are not limited to, the following activities:

1. Guided discussions
2. Individual and team active learning strategies
 - a. Individual and team case application of content and concepts
 - b. Individual and team case presentation of content and concepts
 - c. Individual and team SOAP note(s)

Case Studies Expectations

Attendance and full participation are a student obligation and expectation. Failure to attend each Case Studies session will result in an **2% deduction from the final course grade to which the session is assigned**. To ensure equitable distribution among P2 fall courses, each session will have an "Assigned Course" that will house the 2% deduction in the final course grade in the event of an unapproved absence. Failure to attend all Case Studies sessions would result in a 2% deduction from the final grade of each of the following courses: PHAR 7193, 7302, 7481, 7582, and 7219.

At the discretion of the session's assigned course coordinator, absences from a case session may be either approved or unapproved. Students are expected to notify the session's assigned course coordinator *as soon as possible, and no later than 9 AM the morning of the requested absence, with supporting documentation of the absence provided within 3 days of the absence per the College of Pharmacy Policies available in Part 2 of the Syllabus.*

Example. Unapproved absences for sessions 2 and 4, would result in 2% final course grade deduction for both PHAR 7302 and PHAR 7582. At the end of the semester if the student's course grades for PHAR 7302 were 91% and 71% respectively, their final grade would be reduced to 89% and 69% respectively because of their Case Studies' absences.

Case Study Schedule

Case Studies will be held over five sessions on Fridays from 2-5 PM. Although each session's attendance deduction is assigned to a specific course, case content is not limited to that course and will be integrated into summative exams for the P2 fall courses.

P2 Fall 2021 Case Study Schedule					
Session	Date	Assigned Course	Assigned Course Coordinator	Topic	Instructors
1	9/17	PHAR 7193	Dr. Vega	Case Studies Introduction Case Modeling	Drs. Brazill and Rice
2	10/1	PHAR 7302	Dr. Brunner	Case 1	TBD
3	10/8	PHAR 7481	Dr. Dunn	Case 1	TBD
4	11/5	PHAR 7582	Dr. Wilder	Case 2	TBD
5	11/19	PHAR 7219	Dr. Smith	Case 2 Individual Presentation	TBD

PHAR 7481 Course Schedule – Fall 2021

DAY	TOPIC	Instructor	CLO	Disease States
M: 8/23	Course Overview (10 minutes) Physiology/Pharmacology: Renal Physiology and Volume Regulation*	Dunn Glavy	1, 2	S03.99
T: 8/24	Pathophysiology/Pharmacology: Fluid and Electrolyte Disorders*	Glavy	1, 2	S04.05
M: 8/30	Pathophysiology/Pharmacology: Acid-Base Disorders*	Glavy	1, 2	S04.06
T: 8/31	Clinical Chemistry: Introduction to Laboratory Values*	Dunn	1, 2, 3	S20.99
M: 9/6	LABOR DAY (NO CLASS)			
T: 9/7	Pharmacotherapy: Na and Water Disorders*	Dunn	1, 2, 3	S04.05 S04.07
M: 9/13	Pharmacotherapy: Na and Water Disorders	Dunn (Brazill)	1, 2, 3	S04.09
T: 9/14	Pharmacotherapy: Ca, Mg, K and Phos Disorders*	Dunn (Brazill)	1, 2, 3	S04.05
F: 9/17	Session 1 Case Study (2-5 pm)			
M: 9/20	Pharmacotherapy: Acid-Base Disorders*	Dunn	1, 2, 3	S04.06
T: 9/21	Pharmacotherapy: Acid-Base Disorders	Dunn	1, 2, 3	
M: 9/27	Midterm Exam 1 - covers material through 9/21			
T: 9/28	Pathophysiology/Pharmacology: Renal Diseases (AKI, DIKI, CKD)*	Glavy	1, 2	S04.01-03
F: 10/1	Session 2 Case Study (2-5 pm)			
M: 10/4	Clinical Chemistry: Laboratory Values and Evaluation of Renal Function*	Dunn	1, 2, 3	S04.04
T: 10/5	Pharmacotherapy: Acute Kidney Injury*	Dunn	1, 2, 3	S04.01
F: 10/8	Session 3 Case Study (2-5 pm) – this grade is assigned to PHAR 7481 (Renal/Respiratory)			S04.12
M: 10/11	Pharmacotherapy: Acute Kidney Injury			S11.06
T: 10/12	Pharmacotherapy: Drug-induced Kidney Disease*	Dunn	1, 2, 3	S04.03
M: 10/18	Pharmacotherapy: Dialysis and Renal Replacement Therapies*	Dunn	1, 2, 3	S04.08
T: 10/19	Pathophysiology/Pharmacology/Pharmacotherapy: Anemia (Iron, Folate, B12, Chronic)*	Brazill	1, 2, 3	S14.01
M: 10/25	Pharmacotherapy: Chronic Kidney Disease*	Rice	1, 2, 3	S04.02 S04.12
T: 10/26	Pharmacotherapy: Chronic Kidney Disease	Rice	1, 2, 3	S04.13
M: 11/1	Midterm Exam 2 - covers material through 10/26			
T: 11/2	Pathophysiology/Pharmacology: Respiratory Diseases*	Wang	1, 2	S02.01-02
F: 11/5	Session 4 Case Study (2-5 pm)			
M: 11/8	Pharmacotherapy: COPD (acute/chronic)*	Bratteli	1, 2, 3	S02.02
T: 11/9	Pharmacotherapy: COPD (acute/chronic)	Bratteli	1, 2, 3	
M: 11/15	Pharmacotherapy: Asthma (acute/chronic/action plans)*	Bratteli	1, 2, 3	S02.01
T: 11/16	Pharmacotherapy: Asthma (acute/chronic/action plans)	Bratteli	1, 2, 3	
F: 11/19	Session 5 Case Study (2-5 pm)			
M: 11/22	THANKSGIVING BREAK (NO CLASS)			
T: 11/23				
M: 11/29	Pharmacotherapy: Cystic Fibrosis*	Bratteli	1, 2, 3	S02.03
T: 11/30	Pharmacotherapy: Smoking Cessation*	Yett	1, 2, 3	S06.14
M: 12/6 @ 9a-12p	Final Exam (cumulative + new material through 11/30)			

– * Indicates intended dates for RATs.

– Please note that dates, topics, and assignments are subject to change. In the event of a change, you will be given ample notification of the change.