

**Integrated Pharmacotherapy 1 (Ptx-1)**  
**Renal/Respiratory**  
**PHAR 7481**  
Fall Semester 2020

**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**

Tuesday & Wednesday, 1:00 pm – 3:00 pm; W.T. Brookshire Hall room # 136 & 137

**Course Coordinator**

Rebecca Dunn, Pharm.D., BCPS

W.T. Brookshire Hall Room 237

Phone number: 903.566.6101

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 and Part 3 contains policies specific to Fall 2020. 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.utt Tyler.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, 4<sup>th</sup> Edition. Golan DE, Armstrong EJ, Armstrong AW. Wolters Kluwer. (©2017) ISBN 9781451191004
3. Renal Pathophysiology, 4<sup>th</sup> 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: [utt Tyler.edu/canvas](http://utt Tyler.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. Case studies
5. Educational video clips (online and in class)
6. 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</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), midterm examinations, final written examinations, skills assessments, graded application assignments, participation in team-based projects, peer evaluations and other assessment methods that may include, but not limited to, Objective Structured Clinical Examinations (OSCE). 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.

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.

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.

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

**\*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 %

**PHAR 7481 Course Schedule**

DAY	TOPIC	Instructor	CLO	Disease States
T: 8/25	<i>Course Overview (10 minutes)/Clinical Chemistry: Introduction to Laboratory Values*</i>	Dunn	1, 2, 3	S20.01
W: 8/26	Physiology/Pharmacology: Renal Physiology and Volume Regulation*	Glavy	1, 2	S04.07
T: 9/1	Pathophysiology/Pharmacology: Fluid and Electrolyte Disorders*	Glavy	1, 2	S04.05
W: 9/2	Pharmacotherapy: Na and Water Disorders*	Dunn	1, 2, 3	S04.05
T: 9/8	Pharmacotherapy: Na and Water Disorders	Dunn	1, 2, 3	S04.07 S04.09
W: 9/9	Pharmacotherapy: Ca, Mg, K and Phos Disorders*	Dunn	1, 2, 3	S04.05
T: 9/15	Pathophysiology/Pharmacology: Acid-Base Disorders*	Glavy	1, 2	S04.06
W: 9/16	Pharmacotherapy: Acid-Base Disorders*	Dunn	1, 2, 3	S04.06
T: 9/22	Pharmacotherapy: Acid-Base Disorders	Dunn	1, 2, 3	S04.06
W: 9/23	Clinical Chemistry: Laboratory Values and Evaluation of Renal Function*	Dunn	1, 2, 3	S04.04
<b>T: 9/29</b>	<b>Midterm Exam 1 - covers material through 9/22</b>			
W: 9/30	Pathophysiology/Pharmacology: Renal Diseases (AKI, DIKI, CKD)*	Glavy	1, 2	S04.01-03
T: 10/6	Pharmacotherapy: Acute Kidney Injury*	Dunn	1, 2, 3	S04.01
W: 10/7	Pharmacotherapy: Acute Kidney Injury	Dunn	1, 2, 3	S04.01 S.11.06
T: 10/13	Pharmacotherapy: Drug-induced Kidney Disease*	Dunn	1, 2, 3	S04.03
W: 10/14	Pharmacotherapy: Chronic Kidney Disease*	Rice	1, 2, 3	S04.02
T: 10/20	Pharmacotherapy: Chronic Kidney Disease*	Rice	1, 2, 3	S04.02
W: 10/21	Pharmacotherapy: Dialysis and Renal Replacement Therapies*	Khalid	1, 2, 3	S04.08
T: 10/27	Pathophysiology/Pharmacology/Pharmacotherapy: Anemia (Iron, Folate, B12, Chronic)*	Brazill	1, 2, 3	S14.01
W: 10/28	Pathophysiology/Pharmacology: Respiratory Diseases*	Wang	1, 2	S02.01-2
<b>T: 11/3</b>	<b>Midterm Exam 2 - covers material through 10/27</b>			
W: 11/4	Pharmacotherapy: COPD (acute/chronic)*	Bratteli	1, 2, 3	S02.02
T: 11/10	Pharmacotherapy: COPD (acute/chronic)	Bratteli	1, 2, 3	S02.02
W: 11/11	Pharmacotherapy: Asthma (acute/chronic/action plans)*	Bratteli	1, 2, 3	S02.01
T: 11/17	Pharmacotherapy: Asthma (acute/chronic/action plans)	Bratteli	1, 2, 3	S02.01
W: 11/18	Pharmacotherapy: Cystic Fibrosis*	Bratteli	1, 2, 3	S02.03
<b>T: 11/24</b>	<b>Thanksgiving Break – No Class</b>			
<b>W: 11/25</b>				
T: 12/1 ( <i>virtual</i> )	Pharmacotherapy: Smoking Cessation*	Yu	1, 2, 3	S20.02
W: 12/2 ( <i>virtual</i> )	Pharmacotherapy: Smoking Cessation	Yu	1, 2, 3	S20.02
<b>M: 12/7 (<i>virtual</i>) 9a-12p</b>	<b>Final Exam (cumulative + new material through 12/2)</b>			

– \* 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.