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

Fall 2024

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

Thursday and Friday, 9:00 am - 11:00 am; W.T. Brookshire Hall room # 235

Course Coordinator

Rebecca Dunn, Pharm.D. W.T. Brookshire Hall Room 328 Phone number: 903.566.6101 Email: rdunn@uttyler.edu

Office hours: 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 at https://www.uttyler.edu/pharmacy/academic-affairs/files/fcop-syllabus-part2-ay2023-24.pdf. 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.uttyler.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: uttyler.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
- 7. Educational video clips (online and in class)

Course Learning Outcomes (CLOs)

	CLOs	PLO(s) Assessed for this CLO (1-15)	ACPE Std. 11 & 12 (1-4)	Grading Method	Assessment Methods
1.	Select appropriate medication therapy for renal and respiratory conditions based on principles of physiology, pathophysiology and pharmacology.	1, 2	4	ES	1
2.	Formulate patient-and disease-specific care plans for pharmacotherapeutic regimens in renal and respiratory disorders.	1, 2, 4	4	ES	1
3.	Design monitoring plans for efficacy, toxicity and adverse effects for pharmacotherapuetic regimens in renal and respiratory disorders.	1, 2, 6	4	ES	1

Course Assessment Methods

	Assessment Method	Description 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	
1	Final Exam Multiple Choice or Multiple Selection Question(s)	Standard MCQ and Select All that apply questions.	
2	Final Exam Open Ended Question(s)	FITB, short answer, essay	

Grading Policy & Grade Calculation

Grades will be determined based on evaluation of individual and team readiness assessment tests (iRATs, tRATs), midterm examinations, written examinations, skills assessments, graded application assignments, and participation in team-based projects. 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 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 Part 2 of the syllabus (https://www.uttyler.edu/pharmacy/academic-affairs/files/fcop-syllabus-part2-ay2023-24.pdf).

During the time the course is in progress, students who obtain less than 75% on any summative assessment or a total course grade of less than 75% during a particular semester will receive an academic alert from the course coordinator and the Office of Academic Affairs and be subject to weekly in-course remediation with the course instructor(s).

Standard Grade Calculation			
Individual Component	95%		
iRATs/quizzes	5%		
Midterm 1	25%		
Midterm 2	25%		
Final Exam	40%		
Team Component			
tRATs	2.5%		
Applications/Team Projects	2.5%		
Total	100%		

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

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А	90 - 100 %
В	80 - 89.999 %
С	70 - 79.999 %
D	65.0 - 69.999 %
F	< 65.0 %

PHAR 7481 Course Schedule - Fall 2024

DAY	TOPIC	Instructor	CLO	Disease States			
Th. 0/20	Course Overview (10 minutes)	Dunn	1.2				
Th: 8/29	Physiology/Pharmacology: Renal Physiology and Volume Regulation*	Glavy	1, 2	S03.99			
Fr: 8/30	Pathophysiology/Pharmacology: Fluid and Electrolyte Disorders*	Glavy	1, 2	S04.05			
Th: 9/5	Pathophysiology/Pharmacology: Acid-Base Disorders*	Glavy	1, 2	S04.06			
Fr: 9/6	Clinical Chemistry: Introduction to Laboratory Values*	Dunn	1, 2, 3	S20.99			
Th: 9/12	Pharmacotherapy: Na and Water Disorders*	Dunn		S04.05			
Fr: 9/13	Pharmacotherapy: Na and Water Disorders	Dunn	1, 2, 3	S04.07 S04.09			
Th: 9/19	Pharmacotherapy: Ca, Mg, K and Phos Disorders*	Dunn	1, 2, 3	S04.05			
Fr: 9/20	Pharmacotherapy: Acid-Base Disorders*	Dunn					
Th: 9/26	Pharmacotherapy: Acid-Base Disorders	Dunn	1, 2, 3	S04.06			
Fr: 9/27	Pathophysiology/Pharmacology: Renal Diseases (AKI, DIKI, CKD)*	Glavy	1, 2	S04.01-03			
Th: 10/3	Midterm Exam 1 - covers material through 9/26	<u> </u>	•	•			
F: 10/4	Clinical Chemistry: Laboratory Values and Evaluation of Renal Function*	Dunn	1, 2, 3	S04.04			
Th: 10/10	Pharmacotherapy: Acute Kidney Injury*	Dunn	4.2.2	S04.01			
Fr: 10/11	Pharmacotherapy: Acute Kidney Injury	Dunn	1, 2, 3	S04.12 S11.06			
Th: 10/17	Pharmacotherapy: Drug-induced Kidney Disease*	Dunn	1, 2, 3	S04.03			
Fr: 10/18	Pharmacotherapy: Dialysis and Renal Replacement Therapies*	Dunn	1, 2, 3	\$04.08			
Th: 10/24	CAREER SUCCESS CONFERENCE (required attendance)	·					
	Pharmacotherapy: Chronic Kidney Disease*		1, 2, 3	S04.02			
Fr: 10/25		Dunn		S04.12			
				S04.13			
TI 40/24	Pharmacotherapy: Chronic Kidney Disease		1, 2, 3	S04.02			
Th: 10/31		Dunn		S04.12			
Fr: 11/1	Pathophysiology/Pharmacology/Pharmacotherapy: Anemia (Iron, Folate, B12, Chronic)*	Dunn	1, 2, 3	\$04.13 \$14.01			
Th: 11/7	Midterm Exam 2 - covers material through 11/1	33		02.102			
F: 11/8	Pathophysiology/Pharmacology: Respiratory Diseases*	Wang	1, 2	S02.0102			
Th: 11/14	Pharmacotherapy: COPD (acute/chronic)*	Bratteli					
Fr: 11/15	Pharmacotherapy: COPD (acute/chronic)	Bratteli	1, 2, 3	S02.02			
Th: 11/21	Pharmacotherapy: Asthma (acute/chronic/action plans)*	Bratteli					
Fr: 11/22	Pharmacotherapy: Asthma (acute/chronic/action plans)	Bratteli	1, 2, 3	S02.01			
Th: 11/28	THANKSGIVING BREAK (NO CLASS)			1			
Fr: 11/29	THANKSGIVING BREAK (NO CLASS)						
Th: 12/5	Pharmacotherapy: Cystic Fibrosis*	Bratteli	1, 2, 3	S02.03			
Fr: 12/6	Final Exam Review	All	1				
	Final Exam (cumulative + new material through 12/6)						

⁻ 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.