

## Integrated Pharmacotherapy 3 (Ptx 3)

PHAR 7483

Spring 2021

### Course Description

This integrated pharmacy course focuses on pathophysiology, medicinal chemistry, and pharmacology to develop therapeutic plans for patients with cardiovascular disorders.

### Additional Course Information

Upon successful completion of PTx 3, students will have developed skills regarding the pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapy related cardiovascular disorders. Ultimately, this will allow the student to develop individualized patient care plans incorporating evidence-based principles and patient-specific factors.

### Course Credit

4 credit hours

### Class Meeting Days, Time & Location

Monday 2:00 - 4:00 pm

Thursday 3:00 - 5:00 pm

W.T. Brookshire Hall Room 133 and 136

### Course Coordinator

Rachel A. Bratteli, Pharm.D, BCACP

Clinical Assistant Professor

W.T. Brookshire Hall Room 250

Phone number: 903.566.6165

Email: rbratteli@uttyler.edu

Office hours: Monday 11:00 am - 2:00 pm or by appointment

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/files/fcop-syllabus-policies.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. \*Access Pharmacy. Available at: <http://accesspharmacy.mhmedical.com/>.
2. \*Pathophysiology of Disease: An Introduction to Clinical Medicine (7<sup>th</sup> Edition). Hammer GD and McPhee SJ. Lange-McGraw Hill. ISBN: 978-0-07-180600-8, 2014.
3. \*Applied Biopharmaceutics & Pharmacokinetics, 6e; Leon Shargel, Susanna Wu-Pong, Andrew B.C. Yu; McGraw-Hill Education (c)2012; ISBN: 978-0-07-160393-5.
4. \*Patrick GL. An Introduction to Medicinal Chemistry. 6<sup>th</sup> edition. Oxford: Oxford University Press; 2017.

5. \*Basic and Clinical Pharmacology (12<sup>th</sup> Edition). Katzung BG, Masters SB, Trevor AJ. Lange-McGraw Hill. ISBN: 978-0-07-176401-8, 2012.
6. \*Goodman and Gilman's The Pharmacological Basis of Therapeutics, 12e; McGraw-Hill Education ©2011; ISN 978-0-07-162442-8.
7. \*Pharmacotherapy: A Pathophysiologic Approach, 9<sup>th</sup> Edition. DiPiro JT, Talbert RL, Tee GV, et al. McGraw-Hill Education. (©2014) ISBN: 978-0-07-180053-2.
8. \*Kasper D, Fauci A, Hauser S, et al. Harrison's Principles of Internal Medicine. 19th ed. McGraw-Hill Education; 2015.
9. American Pharmacist Association. Pharmacy Library. Available at: <http://pharmacylibrary.com>.
10. Other required materials will be posted on the classes' Canvas site. The site address is: [uttyler.edu/canvas](http://uttyler.edu/canvas).

### Recommended Materials

1. Herrier RN, Apgar DA, Boyce RW, et al. Patient Assessment in Pharmacy. McGraw-Hill Education; 2015.

### Course Format

The course may include, but are 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 assessment tests (tRATs)
  - b. Team application of content and concepts

### Course Learning Outcomes (CLOs)

CLOs	Related PLO(s)	Assessment Methods	Grading Method	JCPP Skill(s) Assessed	ACCP Std. 11 & 12
1. Explain the pathophysiology of cardiovascular disorders including hypertension, dyslipidemia, atherosclerosis, peripheral arterial disease, pulmonary arterial hypertension, ischemic heart disease, acute coronary syndrome, arrhythmias, stroke, and venous thromboembolism.	13	CAT	ES	-	-
2. Discuss and predict biochemical and cellular consequences from the medicinal chemistry and pharmacology of cardiovascular drugs.	13	CAT	ES	-	-
3. Develop and recommend individualized, evidence-based therapeutic plans based upon patient-specific factors for cardiovascular disease states.	1,2,13	CAT	ES	1,2,3,4	-

### Course Assessment Methods

	Assessment Method	Description
1	Final Exam Multiple Choice or Multiple Selection Question(s)	<i>Standard MCQ, open-ended, FITB, matching, and select all that apply questions.</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 Objective Structured Clinical Examinations (OSCE). Examinations, RATs and CATs may consist of multiple-choice, true/false, 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	20%
Assessment 1	25%
Assessment 2	25%
Final Written Exam	25%
<b>Team Component</b>	<b>5%</b>
tRATs	2.5%
Team Application(s)	2.5%
<b>Total</b>	<b>100%</b>

*\* If the student's weighted average for the summative assessments (CATs/midterms/assessments/Final Exam) is < 70%, the weighted average corresponds to the respective letter grade and is the final course grade.*

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

**PHAR 7483 Course Schedule - Spring 2021**

<b>Week</b>	<b>Day</b>	<b>Topic</b>	<b>Instructor</b>	<b>CLO</b>	<b>WSOP Category</b>
<b>1</b>	1/11	Pathophysiology: Normal structure and function*	Romerill	1	S01
	1/14	Pathophysiology: Atherosclerosis + PAD*	Romerill	1	S01
<b>2</b>	1/18	<b>MLK Day</b>			
	1/21	Pathophysiology: Hypertension, Ischemic Heart Disease, and ACS*	Romerill	1	S01
<b>3</b>	1/25	Pathophysiology: Heart Failure, PAH, Cardiomyopathy*	Romerill	2	S01
	1/28	Pharmacology: Introduction to Cardiovascular Pharmacology- Anti-hypertensives, vasopressors, vasodilators, PDE inhibitors and prostacyclins*	Wang	2	S01
<b>4</b>	2/1	Pharmacology: Antiplatelets/thrombolytics and Anti-hyperlipidemics*	Glavy	2	S01
	2/4	Medicinal Chemistry: Antihypertensives*	Abdelaziz	2	S01
<b>5</b>	2/8	Medicinal Chemistry: Vasodilators, Calcium Channel Blockers, Inotropes*	Abdelaziz	2	S01
	2/11	Medicinal Chemistry: Antiarrhythmics, antihyperlipidemics, and antithrombotics *	Abdelaziz	2	S01
<b>6</b>	2/15	Pharmacotherapy: Hypertension*	Bratteli	3	S01.01
	<b>2/18</b>	<b>Assessment 1 (Through Week 5 Friday)</b>	<b>All</b>	<b>1,2</b>	
<b>7</b>	2/22	Pharmacotherapy: Hypertension emergency/urgency*	Romerill	3	S01.01
	2/25	Pharmacotherapy: Dyslipidemia*	Bratteli	3	S01.08
<b>8</b>	3/1	Pharmacotherapy: PAD/PAH*	Romerill	3	S01.08
	3/4	Pharmacotherapy: Stable Ischemic Heart Disease	Wallace-Gay	3	S01.03
<b>Spring Break</b>					
<b>9</b>	3/15	Pharmacotherapy: Acute Coronary Syndrome*	Romerill	3	S01.04
	3/18	Pharmacotherapy: Chronic Heart Failure*	Wallace-Gay	3	S01.02
<b>10</b>	3/22	Pharmacotherapy: Chronic Heart Failure	Wallace-Gay	3	S01.02
	3/25	Pharmacotherapy: Acute Decompensated Heart Failure*	Romerill	3	S01.02
<b>11</b>	3/29	Pharmacotherapy: Ventricular Arrhythmias*	Romerill	3	
	<b>4/1</b>	<b>Assessment 2 (Through Week 10 Friday)</b>	<b>All</b>	<b>3</b>	<b>S01.05</b>
<b>12</b>	4/5	Pharmacotherapy: Atrial Fibrillation Arrhythmia	Romerill	3	S01.05
	4/8	Pharmacotherapy: Atrial Fibrillation Anticoagulation*	Bratteli	3	S01.05, S01.06
<b>13</b>	4/12	Pharmacotherapy: Stroke*	Romerill	3	S01.09
	4/15	Pharmacotherapy: Stroke	Romerill	3	S01.09
<b>14</b>	4/19	Pharmacotherapy: Venous thromboembolism (Acute)*	Romerill	3	S01.06
	4/22	Pharmacotherapy: Venous thromboembolism (Chronic)*	Bratteli	3	S01.06
<b>15</b>	<b>TBD</b>	<b>Final Exam (Cumulative)</b>	<b>All</b>	<b>1,2,3</b>	

**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. \*Indicates possible RAT date.**