# Integrated Pharmacotherapy VII: Selected Topics & Special Populations (Ptx VII) PHAR 7487 Spring 2024

#### **Course Description**

This integrated pharmacy course focuses on providing optimal patient care for special populations by using pathophysiology, medicinal chemistry, pharmacology, and therapeutics to develop therapeutic plans.

#### **Additional Course Description**

This course introduces basic science and clinical concepts of pharmacy practice. The focus of this course surrounds scientific and therapeutic aspects of diseases of the skin and selected ophthalmic disorders and infectious diseases. In addition, this course will focus on how to appropriately manage geriatric and pediatric populations as well as reinforcing cultural sensitivity while providing optimal care. Development of patient-specific therapeutic plans using non-prescription, non-pharmacological, complementary and prescription modalities will be learned.

#### **Course Credit**

4 credit hours

#### **Pre-Requisites**

PHAR 7585 Integrated Pharmacotherapy V: Endocrine, Women's & Men's Health PHAR 7586 Integrated Pharmacotherapy VI: Psychiatry, Neurology, & Pain Management

#### **Class Meeting Days, Time & Location**

Mondays: 10:00am – 12:00pm; Wednesdays: 10:00am – 12:00pm W.T. Brookshire Hall Room 234

#### **Course Coordinator**

Jonathan S. Newsome, Pharm.D., BCGP Clinical Associate Professor W.T. Brookshire Hall Room 238 Phone number: 903.566.6233 Email: jonathannewsome@uttyler.edu Office hours: Mondays: 1pm – 3pm; 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 at <u>https://www.uttyler.edu/pharmacy/academic-affairs/files/fcop-syllabus-policies.pdf</u>. 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\* (<u>http://library.uttyler.edu/</u>) 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. \*Foye's Principles of Medicinal Chemistry, 8<sup>th</sup> Ed. (2019) Thomas Lemke et. al. Wolters Kluwer Health (Electronically available on Robert R. Muntz library)
- 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. \*Dipiro JT, Talbert RL, Yee GC, et. al. Pharmacotherapy: A Pathophysiologic Approach, 11e. McGraw-Hill Education, 2020. ISBN: 978-1-260-116818-6
- 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: <u>http://pharmacylibrary.com</u>.
- 10. Other required materials will be posted on the classes' Canvas site. The site address is: <u>uttyler.edu/canvas</u>.

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#### **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

	CLOs	PLO(s) Assessed for this CLO (1-15)	EPAs	ACPE Std. 11 & 12	Grading Method	Assessment Methods
1	<ul> <li>Evaluate how biochemical, immunological, socioeconomic, and physiological factors influence health and disease.</li> </ul>	1	-	-	ES	1,3
2	. Review the pharmacology for the drug classes utilized to treat dermatologic, ophthalmic, and otolaryngological disorders and drug toxicity.	1	-	-	ES	1,3
3.	Discuss how chemical structure impacts treatment.	1	-	-	ES	1,3
4	<ul> <li>Formulate patient-specific care plans using prescription, non-prescription, non-pharmacological and complimentary modalities.</li> </ul>	2, 7	1,2,3,4	-	ES, OTH	1,2,3,4
5	<ul> <li>Discuss patient care management for geriatric and pediatric populations</li> </ul>	1	-	-	ES	1,2,3,4

#### **Course Learning Outcomes (CLOs)**

#### **Course Assessment Methods**

	Assessment Method	Description
1	Multiple Choice or Multiple	Standard MCQ and Select All that apply questions on the
	Selection Question(s)	iRATs/tRATs, assessments, and final exam.
2	Case Studies	Traditional case studies used for graded applications
3	Open Ended Questions	
4	SOAP Notes	

#### **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*				
Individual Component				
Weekly Quizzes/Other Individual Activities				
Major Assessments (e.g., Midterm/Final Exams)				
Midterm 1	20%			
Midterm 2	20%			
Midterm 3	20%			
Final Exam	30%			
Team Component				
tRATs/team applications and assignments				
Total	100%			

# \*The final course letter arade will be determined accordina to the following arading scheme:

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

## PHAR 7487 Course Schedule

Week	Day	Торіс	Instructor	CLO	Disease Category	
1	1/17	Pharmacology: Virology + Antivirals	Newsome	2,4	S15.05B	
2	1/22	Pharmacotherapy: Invasive Fungal Infections	Smith	2,4	S15.13	
	1/24	Medicinal Chemistry: HIV	Abdelaziz	3	S15.15	
-	1/29	Pharmacotherapy: HIV/AIDS	Newsome	2,4	S15.15	
3	1/31	Pharmacotherapy: Opportunistic Infections	Newsome	2,4	S15.14	
MIDTERM 1 (2/5/24)						
4	2/7	Solid Organ Transplant	Newsome	4	S10.02	
F	2/12	Alopecia	Newsome	2,4	S13.07	
Э	2/14	Psoriasis	Newsome	2,4	S13.02	
c	2/19	Acne	Newsome	2,4	S13.01	
D	2/21	Drug-Induced Dermatological Disorders	Newsome	2,4	S13.05	
7	2/26	Glaucoma & Macular Degeneration	Newsome	1,2,4	S12.09-10	
/	2/28	Pharmacotherapy: Hepatitis	Newsome	2,4	S03.06	
MIDTERM 2 (3/4/24)						
8	3/6	Introduction to Health Disparities / Conceptual and Historical Aspects of Race/Ethnicity and Health	Newsome	1	S20.99	
SPRING BREAK (3/11 – 3/15)						
	3/18	Pharmacokinetics / Pharmacodynamics: Pediatrics	Newsome	3, 5	S18.04	
9	3/20	Pharmacotherapy: Dehydration Assessment & Oral Replacement Therapy	Newsome	5	S18.01	
10	3/25	Pharmacotherapy: Dosage Calculations and Dosage Forms	Vega	5	S18.02	
	3/27	Pharmacotherapy: Nutrition in Infants and Children	Newsome	1,5	S18.01	
11	4/1	Growth and Development	Newsome	1, 5	S18.03	
	4/3	Toxicology: Classification of Maternal/Fetal Risk	Newsome	1, 4	S19.18	
MIDTERM 3 (4/8/24)						
12	4/10	Pharmacokinetics / Pharmacodynamics: Geriatrics	Newsome	3, 5	S18.09	
13	4/15	Pharmacotherapy: Medication Use in Older Adults	Newsome	5	S18.08	
	4/17	Pharmacotherapy: Geriatric Syndromes	Newsome	5	S18.06-07	
14	4/22	Palliative Care	Newsome	4	S18.19	
	4/24	Hospice Care	Newsome	4	S18.18	
FINAL EXAM						
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 quiz date