

Integrated Pharmacotherapy VII: Selected Topics & Special Populations (Ptx VII)

PHAR 7487

Spring 2022

Catalogue 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.

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: 2:00pm – 4:00pm; Wednesdays: 3:00pm – 5:00pm

W.T. Brookshire Hall Room 133

Course Coordinator

Jonathan S. Newsome, Pharm.D., BCGP

Clinical Associate Professor

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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 as a PDF at <https://www.uttyler.edu/pharmacy/academic-affairs/files/fcop-syllabus-policies.pdf>. 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 (7th 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, 8th Ed. (2019) Thomas Lemke et. al. Wolters Kluwer Health (Electronically available on Robert R. Muntz library)
5. *Basic and Clinical Pharmacology (12th 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: <http://pharmacylibrary.com>.
10. Other required materials will be posted on the classes' Canvas site. The site address is: uttyler.edu/canvas.

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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

Course Learning Outcomes (CLOs)

CLOs	Related PLO(s)	Assessment Methods	Grading Method	EPAs	ACPE Std. 11 & 12
1. Evaluate how biochemical, immunological, socioeconomic, and physiological factors influence health and disease.	1	1,3	ES	1.1	-
2. Review the pharmacology for the drug classes utilized to treat dermatologic, ophthalmic, and otolaryngological disorders and drug toxicity.	1	1,3	ES	-	-
3. Discuss how chemical structure impacts treatment.	1	1,3	ES	-	-
4. Formulate patient-specific care plans using prescription, non-prescription, non-pharmacological and complimentary modalities.	2, 7	1,2,3,4	ES, OTH	1.1, 1.2, 4.2	-
5. Discuss patient care management for geriatric and pediatric populations	1	1,2,3,4	ES	1.1, 1.2, 3.3	12.4

Course Assessment Methods

	Assessment Method	Description
1	Multiple Choice or Multiple Selection Question(s)	<i>Standard MCQ and Select All that apply questions on the iRATs/tRATs, assessments, and final exam.</i>
2	Case Studies	<i>Traditional case studies used for graded applications</i>
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	95%
iRATs/Other Individual Activities	5%
Major Assessments (e.g., Midterm/Final Exams)	90%
• Midterm 1	30%
• Midterm 2	30%
• Final Exam	30%
Team Component	5%
tRATs/team applications and assignments	3%
Case Studies	2%
Total	100%

***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 are a longitudinal supplement intended to reinforce and integrate concepts and skills from the didactic curriculum, P1-P3 inclusive. **Content and concepts from Case Studies will be integrated into team applications for the P3 spring 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 for the participating P3 courses. Failure to attend all Case Studies sessions would result in a 2% deduction from the final grade of each of the following courses: PHAR 7487, 7288, 7489, 7296, and 7220. 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 3, would result in 2% final course grade deduction for the above listed courses. At the end of the semester if the student's course grades for PHAR 7487, 7288, 7489, 7296, and 7220 were 91%, 89%, 85%, 90%, and 71% respectively, their final grade would be reduced to 89%, 87%, 83%, 88%, and 69% respectively because of their Case Studies' absences.

Case Study Schedule

Case Studies will be held over three sessions on Fridays from 9AM-12PM. Each session's attendance deduction is assigned to the participating P3 courses. Case content is not limited to the P3 courses and will be integrated into team applications for the P3 spring courses.

P3 Case Study Schedule				
Session	Date	Assigned Course Coordinator	Topic	Instructors
1	2/4	Newsome	Management of a complex HIV patient	P3 course coordinators
2	3/4	TBD	TBA	P3 course coordinators
3	4/8	Brazill	Management of a complex cancer patient with multiple comorbidities	P3 course coordinators

PHAR 7487 Course Schedule

Week	Day	Topic	Instructor	CLO	Disease Category
1	1/10	Pharmacology: Virology + Antivirals	Newsome	2,4	S15.05B
	1/12	Pharmacotherapy: Invasive Fungal Infections	Smith	2,4	S15.13
2	MARTIN LUTHER KING JR DAY (1/17/22)				
	1/19	Medicinal Chemistry: HIV	Abdelaziz	3	S15.15
3	1/24	Pharmacotherapy: HIV/AIDS	Newsome	2,4	S15.15
	1/26	Pharmacotherapy: Opportunistic Infections	Newsome	2,4	S15.14
4	1/31	Solid Organ Transplant	Newsome	4	S10.02
	2/2	Alopecia	Newsome	2,4	S13.07
5	2/7	Psoriasis	Wallace-Gay	2,4	S13.02
MIDTERM 1 (2/9/22)					
6	2/14	Acne	Newsome	2,4	S13.01
	2/16	Drug-Induced Dermatological Disorders	Newsome	2,4	S13.05
7	2/21	Glaucoma & Macular Degeneration	Newsome	1,2,4	S12.09-10
	2/23	Pathophysiology: Hepatitis	Newsome	2,4	S03.06
8	2/28	Pharmacotherapy: Hepatitis	Newsome	2,4	S03.06
	3/2	Introduction to Health Disparities / Conceptual and Historical Aspects of Race/Ethnicity and Health	Newsome	1	S20.99
SPRING BREAK (3/7 – 3/12)					
9	3/14	Pharmacokinetics / Pharmacodynamics: Pediatrics	Newsome	3, 5	S18.04
	3/16	Pharmacotherapy: Dehydration Assessment & Oral Replacement Therapy	Newsome	5	S18.01
10	3/21	Pharmacotherapy: Dosage Calculations and Dosage Forms	Vega	5	S18.02
	3/23	Pharmacotherapy: Nutrition in Infants and Children	TBD	5	S18.23
MIDTERM 2 (3/28/22)					
11	3/30	Growth and Development	Newsome	1, 5	S18.03
12	4/4	Toxicology: Classification of Maternal/Fetal Risk	Newsome	1, 4	S19.18
	4/6	Pharmacokinetics / Pharmacodynamics: Geriatrics	Rice	3, 5	S18.09
13	4/11	Pharmacotherapy: Medication Use in Older Adults	Newsome	5	S18.08
	4/13	Pharmacotherapy: Geriatric Syndromes	Rice	5	S18.06-07
14	4/18	Palliative Care	Rice	4	S18.19
	4/20	Hospice Care	Rice	4	S18.18
FINAL EXAM					
<i>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.</i>					