Integrated Pharmacotherapy 5 (Ptx-5)
Endocrine/Gynecologic/Urologic
PHAR 7585
Fall Semester 2020

Catalogue Description
This integrated pharmacy course focuses on pathophysiology, medicinal chemistry, and pharmacology to develop therapeutic plans for patients with endocrine disorders as well as specific men's and women's health conditions (i.e. menopause and benign prostatic hyperplasia).

Course Description
Utilizing a pathophysiological approach, this integrated course introduces therapeutic topics in endocrinology and men's and women's health. It provides a review and update of student knowledge pertaining to the pharmacology and an introduction of therapeutic approaches for endocrine disease states. Emphasis is placed on consideration for the drug therapy used, therapeutic goals, treatment plans, dosing regimens, and therapeutic endpoints.

Course Credit
5 credit hours

Class Meeting Days, Time & Location
Monday 10:00 am- 12:00 pm (in-person, unless otherwise stated)
Friday 10:00 am – 1:00 pm (online/virtual, unless otherwise stated)
W.T. Brookshire Hall rooms 133 and 136

Course Coordinator
Takova D. Wallace-Gay, PharmD, BCACP
W.T. Brookshire Hall Room 248
Phone number: 903.566.6140
Email: twallacegay@uttyler.edu
Office hours: Wednesday 12-2 pm and 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. Dipiro JT, Talbert RL, Yee GC, et. al. Pharmacotherapy: A Pathophysiologic Approach, 10e. McGraw-Hill Education, 2014. ISBN: 978-1-259-58748-1
2. Dipiro JT, Talbert RL, Yee GC, et. al. Pharmacotherapy: A Pathophysiologic Approach, 11e. McGraw-Hill Education, 2020. ISBN: 978-1-260-116818-6
3. Angaran DM, Whalen K. Medication Therapy Management: A Comprehensive Approach. McGraw-Hill Education, 2015. ISBN: 978-0-07-184869-5
4. Krinsky DL, Berardi RR, Ferreri SP et.al. Handbook of Nonprescription Drugs: An Interactive Approach to Self-Care 17e. American Pharmacist Association, 2014. ISBN: 978-1-58212-160-4

5. Hammer GD, McPhee SJ. Pathophysiology of Disease: An Introduction to Clinical Medicine 7e. Lange-McGraw Hill, 2014. ISBN: 978-0-07-180600-8
6. Katzung BG, Masters SB, Trevor AJ. Basic and Clinical Pharmacology 12e. Lange-McGraw Hill, 2012. ISBN: 978-0-07-176401-8
7. Leon Shargel, Susanna Wu-Pong, Andrew B.C. Yu Applied Biopharmaceutics & Pharmacokinetics, 6e. McGraw-Hill Education, 2012. ISBN: 978-0-07-160393-5

Other required materials will be posted on the classes' Canvas site. The site address is: uttyler.edu/canvas.

Recommended Materials

The course recommended materials are on reserve at the Robert R. Muntz Library.

1. Basic Skills in Interpreting Laboratory Data. 5th Edition. Lee M. American Society of Health-System Pharmacist. ISBN: 978-1-58528-343-9, 2013.
2. Patient Assessment in Pharmacy. Herrier RN, Apgar DA, et. al. McGraw-Hill Education. ISBN: 978-0-07-175194-0, 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. Individual assignments
4. Team projects
5. 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) (1-15)	Assessment Methods	Grading Method[4]	JCPP Skill(s) Assessed (1-5)	AACP Std. 11 & 12 (1-4)
1. Demonstrate understanding of thyroid disorders, diabetes, and gynecologic and urinary disorders and associated risk factors and complications by utilizing pathophysiology, pharmacology, biochemistry, medicinal chemistry and therapeutic knowledge.	1, 2, 5, 7, 8	1, 3, 6, 8, 10, 12	ES, Rubric	1, 2	1,2
2. Demonstrate understanding of endocrine gynecologic/obstetric, and urologic conditions by utilizing pathophysiology, pharmacology and therapeutic knowledge.	1, 2, 5, 7, 8	1, 3, 6, 8, 10, 12	ES, Rubric	1, 2	1,2
3. Amend treatment strategies to meet the needs of special populations of patients with glucose intolerance.	1,2,8	1, 3, 6, 8, 10, 12	ES, Rubric	1, 2	2,4
4. Develop treatment plans for patients with varying endocrine, gynecologic, and urologic disorders and the resulting complications and comorbidities.	1, 2, 5, 6, 7, 8	1, 3, 6, 8, 10, 12	ES, Rubric	1, 2, 3, 5	1,2
5. Analyze transgender patient cases and develop patient treatment plans	n/a	1, 3, 6, 8, 10, 12	ES, Rubric	1, 2	1,2
6. Institute the Joint Commission Pharmacy Practitioners' (JCPP) Patient Care Plan when analyzing and synthesizing patient information.	1, 2, 5, 6, 7	1, 3, 6, 8, 10, 12	ES, Rubric	1-5	1,2

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, T/F and Select all that apply questions.
2	Final Exam Open Ended Question(s)	Fill in the blank and short answer questions
3	Comprehensive Case	Written or Oral Comprehensive Case
4	Team Project	Various case applications and comprehensive cases
5	Oral Presentation	Team Journal Club (abbreviated) and/or oral case defense
6	SOAP Note	Team SOAP notes for comprehensive cases
7	DI Question	Individual DI question submission

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	
iRATs*/iApplications	10%
Formal Drug Information Question	5%
Assessment/iCAT 1	25%
Assessment/iCAT 2	25%
Final Written Exam	30%
tRATs/tApplications and Comprehensive Cases	5%
Total	**100%**

*Lowest 2 iRAT grades will be dropped from your overall iRAT/iApp percentage

A	90 - 100 %
B	80 - 89.99$\bar{9}$ %
C	70 - 79.99$\bar{9}$ %
D	65.0 - 69.99$\bar{9}$ %
F	< 65.0 %

PHAR 7585 Course Schedule

Week	Day M (10a-12p); F (10a-1p)-online	Topic	Instructor	CLO1	Disease State Category
1	**M: 8/24***	Course Overview (~10 minutes) Biochemistry: Endocrine Disorders	Wallace-Gay Pearson	1	S07
	F: 8/28*	Pathophysiology/Pharmacology: HPA Axis/Adrenal Disorders and HPT Axis/Thyroid Disorders Pharmacotherapy: Addison's and Cushing's Diseases	Wang Yang	1,2, 4	S07.03 S07.05 S07.06
2	**M: 8/31**	Pharmacotherapy: Thyroid Disorders	Wallace-Gay	1,2,4	S07.05 S07.06
	F: 9/4*	Medicinal Chemistry: Diabetes Mellitus, Type I and Type 2	Abdelaziz	1	S11.04
3	**M: 9/7**	**Holiday: Labor Day**			
	F: 9/11*	Pathophysiology/Pharmacology: Diabetes Mellitus, Type I and Type II and Complications	Wang	1	S07.01
4	**M: 9/14***	Pharmacotherapy: Nutrition and Obesity Pharmacotherapy: Diabetes Mellitus (DM) risk factors and metabolic syndrome	Newsome	1,2,4	S17.03 S17.04 S07.01
	F: 9/18*	Pharmacotherapy: Type I DM	Wallace-Gay	1,2,4	S07.01
5	**M: 9/21**	Pharmacotherapy: Type II DM	Wallace-Gay	1,2,4	S07.01
	F: 9/25*	Pharmacotherapy: Type II DM --Diabetes Skills Assessment---	Wallace-Gay	1,2,4	S07.01
6	**M: 9/28**	Pharmacotherapy: DM Microvascular Complications Pharmacotherapy: DM Macrovascular Complications	Wallace-Gay	1,2,4	S07.01
	F: 10/2	Pharmacotherapy: DM Special Populations	Newsome	1,2,4	S07.02 S07.01 S08.06
7	**M: 10/5**	**Pharmacotherapy: JCPP Patient Care Process, Comprehensive Case I**			
	F: 10/9	**Assessment 1 [8/24-10/2]**			
8	**M: 10/12**	Pathophysiology: Menstrual Cycle Pathophysiology: Polycystic Ovary Syndrome	Wallace-Gay	1	S08.03 S08.10
	F: 10/16*	Pharmacotherapy: Pregnancy, Lactation/Breastfeeding, and Pre/Post-natal Care **Assessment 1 Review**	Wallace-Gay	1,2,4	S08.04 S08.05

9	**M: 10/19**	Pharmacotherapy: Contraception	Parmentier	1,2,4	S08.01
	F: 10/23*	Pharmacotherapy: Menstrual Cycle Disorders (dysmenorrhea and menorrhagia)	Parmentier	1,2,4	S08.11
10	**M: 10/26**	Pharmacotherapy: Polycystic Ovary Syndrome Pharmacotherapy: Infertility, Endometriosis, and Uterine fibroids	Wallace-Gay	1,2,4	S08.08 S08.09 S08.10
	F: 10/30*	Medicinal Chemistry: Calcium, Vitamin D, SERMS, and Bisphosphonates	Abdelaziz	1	S11.04
11	**M: 11/2**	Pathophysiology: Menopause and Osteoporosis	Newsome	1	S08.03
	F: 11/6*	Pharmacotherapy: Menopause and Osteoporosis	Wallace-Gay	1,2,4	S08.03
12	**M: 11/9**	**Pharmacotherapy: JCPP Patient Care Process, Comprehensive Case II**			
	F: 11/13	**Assessment 2 [10/12-11/6]**			
13	M: 11/16	Biochemistry: Nitric oxide and Anabolic-androgenic steroids	Pearson	1	S09
	F: 11/20	Pathophysiology: BPH and ED Pharmacotherapy: BPH and ED, and Low T **Assessment 2 Review**	Newsome	1,2,4	S09.01 S09.02
14	11/23-11/27	**Holiday: Thanksgiving Break**			
15	M: 11/30*	Pathophysiology: Urinary Incontinence Pharmacotherapy: Urinary Incontinence	Snella	1,2,4	S09.03
	F: 12/4	Pharmacotherapy: Transgender Care Considerations	Wallace-Gay	1,5	S07.07
16	12/7-12/11	**Comprehensive Final Assessment Review and Final Assessment**			
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.					

*iRAT/tRAT