PHAR 7585 Integrated Pharmacotherapy 5
Endocrine, Women's and Men's Health (PTx 5)
Spring 2026

Course Description
This course focuses on the integration of pathophysiology, medicinal chemistry, and pharmacology enabling students to develop therapeutic plans for patients with endocrine disorders and women's and men's health conditions (i.e., menopause and benign prostatic hyperplasia).

Additional Course Information
This course utilizes a pathophysiological approach to discuss endocrinology and women's and men's health topics. Different therapeutic approaches will be discussed guided by clinical practice guidelines. Emphasis will be placed on medication options and selection, dosing regimens, therapeutic goals, and treatment plans.

Course Credit: 5 credit hours

Pre-Requisites:
PHAR 7301: Physiology and Pathophysiology with Pharmacotherapy Correlates

Co-Requisites: Completion or current enrollment in
PHAR 7294: Pharmacy Laboratory 4: Patient Assessment
PHAR 7483: Cardiovascular

Class Meeting Days, Time & Location:
Tuesday, 1:30 pm – 4:00 pm
Thursday 2:00 pm – 4:30 pm
Dedicated SI Thursdays 4:30pm – 5:00 pm
W.T. Brookshire Hall Room 235

Course Coordinators:
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Fisch College of Pharmacy (FCOP) and UT Tyler Policies
This is Part 1 of the syllabus. Part 2 contains UT Tyler and the FCOP policies and procedures. 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, 13edition. Haines ST, Nolin TD, Ellingrod VL, et al. McGraw-Hill. ISBN: 978-1-265-46398-4, 2024.
2. Women's Health Across the Lifespan: A Pharmacotherapeutic Approach, 3e. O'Connell MB, Smith JA, Borgelt LM. McGraw-Hill. ISBN 978-1-265-16422-5, 2024.

Other required materials will be posted within the class Canvas website, which can be accessed via: uttyler.edu/canvas.

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

1. Patient Assessment in Pharmacy. Bethishou L, Bach A, Walsh A. McGraw-Hill Education. ISBN: 978-1-265-12448-9, 2025.
2. Basic and Clinical Pharmacology, 16e. Vanderah TW. Lange-McGraw Hill. ISBN: 978-1-260-46330-9, 2024.
3. Basic Skills in Interpreting Laboratory Data (7th Edition). Edwards CJ, Erstad BL. American Society of Health-System Pharmacist. ISBN: 978-1-58528-641-6, 2022.
4. Whalen K, Hardin HC. Medication Therapy Management: A Comprehensive Approach, 2e. McGraw-Hill Education, 2018. ISBN: 978-1-260-10845-3.
5. Ferreri SP, Hemstreet B, Hume AL, et.al. APHA OTC (previously - Handbook of Nonprescription Drugs: An Interactive Approach to Self-Care). American Pharmacist Association, 2024. ISBN: 978-1-58212-3929. Accessible at: https://pharmacylibrary.com/aphaotc
6. Shargel L, Andrew BC Yu. Applied Biopharmaceutics & Pharmacokinetics, 7e. McGraw-Hill Education, 2016. ISBN: 978-0-07-183093-5

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) or pre-class activities
3. Individual assignments
4. Lecture
5. Active learning strategies
6. Team projects / comprehensive cases
7. Team-based learning strategies:
    a. Team readiness assessment tests (tRATs)
    b. Team application of content and concepts

Course Learning Outcomes (CLOs)

CLOs	PLO(s) Assessed for this CLO (1-12)	ACPE Appendix 1	ACCP Didactic Toolkit	NAPLEX (1.A-5.D)	MPJE (1.1-4.7)	Assessment Methods (1-13)
1. Describe physiologic or pathophysiologic origins of endocrinology-related conditions	1	Physiology Pathophysiology	Adrenal gland disorders Diabetes Hypothyroidism Hyperthyroidism HTN in pregnancy	1.A		1, 3, 4, 6, 7, 9, 11
2. Demonstrate understanding of pharmacology and medicinal chemistry related to treatments for endocrine-related conditions	1	Medicinal Chemistry Pharmacogenomics Pharmacokinetics Pharmacology	Menstrual disorders Contraception Drug safety in pregnancy and lactation Menopause	1.A		1, 3, 6, 7
3. Assess level of patient-specific endocrinology-related condition control/management	2 - 4	Clinical Laboratory Data Clinical Pharmacokinetics Patient Assessment	Osteoporosis Male hypogonadism BPH ED Urinary incontinence	3.A - 3.G		1, 3, 4, 6 - 9, 11
4. Develop treatment plan for endocrinology-related conditions, complications, and comorbidities with pharmacologic and non-pharmacologic modalities	1 - 5, 7, 9	Pharmacotherapy Self-Care Pharmacotherapy	Nutrient deficiency and excess Obesity	2.A 2.C 3.A – 3.G 4.C	2.2 2.3	1, 3, 4, 6 - 9, 11
5. Monitor patient response and adherence to treatment plan	1 - 5	Cultural Awareness Clinical Laboratory Data Clinical Pharmacokinetics Patient Assessment		3.A - 3.G 4.C		1, 3, 4, 6 - 9, 11
6. Analyze scientific literature related to endocrinology conditions to enhance clinical decision making	1, 5	Biostatistics Health Information Retrieval and Evaluation		1.E 1.F		1, 3, 4, 6 - 9, 11

Course Summative Assessment Methods

	Assessment/Examination Method
1	Question-based examination (ExamSoft)
2	Question-based examination (paper)
3	Comprehensive Case
4	Skills Assessment
5	OSCE
6	Team Project
7	Individual Project
8	Oral Presentation
9	SOAP Note
10	Reflection Essay
11	Simulation
12	Internship/Observation
13	Other major assignment. Please specify:

Grading Policy & Grade Calculation

Grades will be determined based on evaluation of assignments, formative assessments (for learning), and summative assessments (for mastery). For all intents and purposes, final examinations are synonymous with summative assessments. Assessments may consist of, but are not limited to, multiple-choice, true/false, fill in the blank, short-answer, essay, and problem-based questions. They may also include a variety of formats beyond the traditional question-based written examination, as each CLO may require different methods to determine student achievement.

Assignments, formative, and summative assessments may be cumulative**.** Students are responsible for material presented during prior courses. The grading scale for the course is described below. The final course grade will be assigned according to the calculated percentage, which will not be rounded. For additional information, see Part 2 of the syllabus.

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: 95%	
iRATs or Other Individual Assignments	5%
Exam I	20%
Exam II	20%
Exam III	20%
Final Exam	30%
Team: 5%	
tRATs or Team Assignments	5%
Total	**100%**

The final course letter grade will be as follows:

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

Appropriate Use of Artificial Intelligence

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, AI is permitted only for specific assignments or situations, and appropriate acknowledgment is required. During some class assignments, the instructor may leverage AI tools to support student learning, allow students to explore how AI tools can be used, and/or better understand their benefits and limitations. Learning how to use AI is an emerging skill, and instructor/students will work through the limitations of these evolving systems together. However, AI will be limited to assignments where AI is a critical component of the learning activity. Instructors will indicate when and where the use of AI tools for this course is appropriate.

PHAR 7585 Course Schedule

Week	Date	Topic	Instructor	CLOs
1	Tues 1/13	Course Overview Pathophysiology/Pharmacology: HPA Axis/Adrenal Disorders and HPT Axis/Thyroid Disorders	Schwartz/ Brown Brazill	1, 2
	Thurs 1/15	Pharmacotherapy: Addison's and Cushing's Diseases	Schwartz	3, 4, 5
2	Tues 1/20	Pharmacotherapy: Thyroid Disorders	Schwartz	3, 4, 5
	Thurs 1/22	Pathophysiology/Pharmacology: Diabetes Mellitus Type I and II, DM Complications	Brazill	1, 2
3	Tues 1/27	Medicinal Chemistry: Diabetes Mellitus, Type I and II	Abdelaziz	2
	Thurs 1/29	Pharmacotherapy: Nutrition and Obesity Pharmacotherapy: Diabetes Mellitus risk factors and metabolic syndrome	Brown	3, 4, 5
4	Tues 2/3	Pharmacotherapy: Type I DM	Brown	3, 4, 5
	Thurs 2/5	**Exam I**	**All**	
5	Tues 2/10	Pharmacotherapy: Type II DM	Brown	3, 4, 5
	Thurs 2/12	Pharmacotherapy: Type II DM Pharmacotherapy: DM Special Populations	Brown	3, 4, 5
6	Tues 2/17	Pharmacotherapy: DM Micro and Macrovascular Complications	Gutierrez	3, 4, 5
	Thurs 2/19	Diabetes Evidence Presentations Day	Brown	6
7	Tues 2/24	Physiology: Menstrual Cycle Pharmacotherapy: Menstrual Cycle Disorders (dysmenorrhea and menorrhagia) Pharmacotherapy: Contraception	Brown	1, 3, 4, 5
	Thurs 2/26	Pharmacotherapy: Contraception (continued) Pharmacotherapy: Pregnancy, Lactation, and Pre/Post-natal Care	Brown	3, 4, 5
8	Tues 3/3	Comprehensive Case Day: DM, Pregnancy, Thyroid	Brown/Schwartz	
	Thurs 3/5	**Exam II**	**All**	
		Spring Break (3/9 – 3/13)		
9	Tues 3/17	Pharmacology: Female Sexual Dysfunction Pharmacotherapy: Infertility, Endometriosis, Uterine Fibroids	Brown	3, 4, 5
	Thurs 3/19	Pathophysiology: Polycystic Ovary Syndrome Pharmacotherapy: Polycystic Ovary Syndrome	Schwartz	3, 4, 5
10	Tues 3/24	Medicinal Chemistry: Calcium, Vitamin D, SERMS, and Bisphosphonates	Abdelaziz	2
	Thurs 3/26	Pathophysiology: Menopause	Schwartz	3, 4, 5

Week	Date	Topic	Instructor	CLOs
		Pharmacotherapy: Menopause		
11	Tues 3/31	Pathophysiology: Osteoporosis Pharmacotherapy: Osteoporosis	Schwartz	3, 4, 5
	Thurs 4/2	Comprehensive Case Day: Osteoporosis, Cushing's/Addison's, Heart Failure	Schwartz/Brown	
12	**Tues 4/7**	**Exam III**	**All**	
	Thurs 4/9	Pathophysiology: Urinary Incontinence Pharmacotherapy: Urinary Incontinence and Neurogenic Bladder	Schwartz	1, 2, 3, 4, 5
13	Tues 4/14	Pathophysiology: BPH and ED Pharmacotherapy: BPH and ED	Schwartz	1, 3, 4, 5
	Thurs 4/16	Comprehensive Case Day: BPH and ED, COPD, Hypertension	Brown	
14	Tues 4/21	Pharmacotherapy: Transgender Care Considerations	Schwartz	3, 4, 5
	Thurs 4/23	Comprehensive Case Day: Metabolic Syndrome and conditions of aging	Brown/Schwartz	
15		**Final Exam** (Week of 4/27-5/1)		