

PHAR 7484: GI, Nutrition, Musculoskeletal Pharmacotherapy
Spring Semester 2022

Course Description

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

Additional Course Information

This course introduces basic science and clinical concepts of pharmacy practice. The focus of this course surrounds scientific and therapeutic aspects of the gastrointestinal and musculoskeletal systems and common diseases affecting those systems. In addition, this course will focus on how to appropriately address nutritional disorders. Development of patient-specific therapeutic plans using non-prescription, non-pharmacological, complementary and prescription modalities will be learned. Ultimately, students will be provided with the knowledge-base and clinical skills necessary to provide pharmaceutical care to patients with gastrointestinal and musculoskeletal disorders.

Course Credit: 4 credit hours

Pre-Requisites: P2 Standing

Co-Requisites: None

Class Meeting Days, Time & Location

Tuesday 3:00 – 5:00PM, W.T. Brookshire Hall Room 137

Friday 2:00 – 4:00PM, W.T. Brookshire Hall Room 137

Course Coordinator

Shannon D. Rice, Pharm.D., BCGP

W.T. Brookshire Hall Room 256

Phone number: 903.565.6437

Email: srice@uttyler.edu

Office hours: TBD (see Canvas course site)

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.utt Tyler.edu/>) or on reserve.

1. Pharmacotherapy: A Pathophysiologic Approach, 10th Edition. DiPiro JT, Talbert RL, Yee GC, et al. McGraw-Hill Education. (©2017) ISBN 978-1-259-58748-1
2. Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy Fourth Edition, 4th Edition. Golan DE, Armstrong EJ, Armstrong AW. Wolters Kluwer. (©2017) ISBN 9781451191004
3. Other required materials will be posted on the classes' Canvas site: utt Tyler.edu/canvas.

Recommended Materials: None

Course Format

The course may include, but is 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 assessments (tRAT)
 - b. Team application of content and concepts
 - c. Team presentation of content and concepts
 - d. Team project(s)
 - e. SOAP note(s)
4. Independent preparation of reflection papers or other assignments

Course Learning Outcomes (CLOs)

CLOs	PLO(s) Assessed for this CLO	EPAs	Assessment Methods	Grading Method	ACPE Std. 11 & 12
1. Students will select appropriate medication therapy for gastrointestinal and musculoskeletal conditions based on principles of physiology, pathophysiology and pharmacology.	1, 2	1.1 1.2	1, 2	ES	4
2. Students will formulate patient-and disease-specific care plans for pharmacotherapeutic regimens in gastrointestinal and musculoskeletal disorders.	1, 2, 4	1.1 1.2 1.3 1.4 4.2	1, 2	ES	4
3. Students will design monitoring plans for efficacy, toxicity, and adverse effects for pharmacotherapeutic regimens in gastrointestinal and musculoskeletal disorders.	1, 2, 6	1.5 3.2	1, 2	ES	4
4. Students will formulate parenteral and enteral nutrition regimens provided a unique patient scenario.	1, 2, 9	1.1 1.2 1.3 1.4 1.5	1, 2	ES	4

Course Assessment Methods

	Assessment Method	Description <i>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</i>
1	Midterms and Final Exam - Multiple Choice or - Multiple Selection Question(s)	<i>Standard MCQ and Select All that apply questions</i>
2	Midterms and Final Exam - Open Ended Question(s)	<i>Handwritten calculations, FITB, short answer</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, 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	15%
Midterm 1	25%
Midterm 2	25%
Final Exam	30%
Team Component	5%
Case Studies	2%
tRATS/Team Application(s)/Team Projects	3%
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 is a longitudinal supplement intended to reinforce and integrate concepts and skills from the P2 spring curriculum. **Content and concepts from Case Studies will be reinforce course content and aim to enhance understanding of content through critical thinking and clinical reasoning that will better prepare you for summative exams for the P2 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)
 - d. Individual and team drug information and clinical literature applications

Case Studies Expectations

Attendance and full participation are a student obligation and expectation. Each Case Study session will be assigned to a course for 2% of the course grade. At the discretion of the session's assigned course coordinator, absences from a case session may be either excused or unexcused. Students are expected to notify the session's assigned course coordinator *as soon as possible, and no later than 8 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.*

- Unexcused absences will result in a grade of zero for that day.
- Students who arrive to class later than 8 AM will be considered tardy and will receive a 50% reduction in their grade for that case study's session.
- Off cycle students (i.e., not enrolled in all Spring P2 courses) are expected to attend and participate in **all case study sessions** regardless of current course enrollment. Off-cycle student absences to case study sessions will be handled on an individual basis.

Case Study Schedule

Case Studies will be held over four sessions on Fridays from 8:00 AM to 11:00 AM. Although each session's attendance deduction is assigned to a specific course, case content is not limited to that course and content from current and previous courses will be integrated into case day activities.

P2 Spring 2022 Case Study Schedule			
Session	Date	Assigned Course Grade	Assigned Course Coordinator
1	1/28	PHAR 7275	Parmentier
2	2/11	PHAR 7483	Yett
3	3/18	PHAR 7484	Rice
4	4/1	PHAR 7294	Weller

PHAR 7484 Course Schedule

Day	Topic	Instructor	CLO	Disease States
1/10-1/14	Clinical Evaluation of the Gastrointestinal Tract *	Dunn - Online	1,2	S03.13
1/11	Physiology & Pharmacology: Gastrointestinal Review and Disorders of Gastric Acid *	Wang	1, 2	S03.13
1/14	Pathophysiology & Pharmacology: Nausea & Vomiting *	Wang	1, 2	S03.01 S03.02 S03.09A S03.09B
1/18	Pharmacotherapy: Nausea and Vomiting *	Rice	1, 2, 3	S03.09A S03.09B
1/21	Pharmacotherapy: GERD, Dyspepsia, Heartburn *	Rice	1, 2, 3	S03.01
1/25	Pharmacotherapy: Peptic Ulcer Disease *	Rice	1, 2, 3	S03.02
1/28	Pharmacotherapy: Gastrointestinal Bleeding *	Rice	1, 2, 3	S03.13
2/1	Pharmacotherapy: Pancreatitis *	Rice	1, 2, 3	S03.11
2/4	Pharmacotherapy: Drug-Induced Liver Disease	Rice	1, 2, 3	S03.05 S03.15
2/8	Midterm Exam 1 - Covers material 1/10 through 2/4			
2/11	Pathophysiology/Pharmacotherapy: Hepatitis	Newsome	1, 2, 3	S03.06
2/15	Pharmacotherapy: Hepatitis	Newsome	1, 2, 3	S03.06
2/18	Pharmacotherapy: Malabsorptive Syndrome *	Romerill	4	S03.12 S03.13 S17.04 S17.05
2/22	Pharmacotherapy: Parenteral Nutrition *	Romerill	4	S03.13 S17.01
2/25	Pharmacotherapy: Enteral Nutrition *	Romerill	4	S03.13 S17.02
3/1	Pathophysiology & Pharmacology: Diarrhea, Constipation, IBS (i.e. disorders of gastrointestinal motility and water flux) *	Wang	1, 2	S03.07 S03.08 S03.10
3/4	Pharmacotherapy: Diarrhea & Constipation *	Yett	1,2, 3	S03.07 S03.08
3/15	Pharmacotherapy: Irritable Bowel Syndrome *	Yett	1,2, 3	S03.10
3/18	Pharmacotherapy & Communication: Cirrhosis *	Dunn	1, 2, 3	S03.04
3/22	Pharmacotherapy & Communication: Cirrhosis	Dunn	1, 2, 3	S03.04
3/25	Midterm Exam 2 - Covers material 2/11 through 3/22			
3/29	Pathophysiology & Pharmacology: Inflammation, Autoimmunity, Immunosuppression and Pain *	Pearson	1, 2	S03.03 S10.01 S10.06

				S11.01 S11.02 S11.03
4/1	Pathophysiology & Pharmacology: Inflammation, Autoimmunity, Immunosuppression and Pain	Pearson	1, 2	S03.03 S10.01 S10.06 S11.01 S11.02 S11.03
4/5	Pharmacotherapy: Inflammatory Bowel Disease	Newsome	1, 2, 3	S03.03
4/8	Pharmacotherapy: Inflammatory Bowel Disease	Newsome	1, 2, 3	S03.03
4/12	Pharmacotherapy: Systemic Lupus Erythematosus	Newsome	1, 2, 3	S10.01
4/15	Pharmacotherapy: Rheumatoid Arthritis	Newsome	1, 2, 3	S11.01
4/19	Pharmacotherapy: Gout *	Rice	1, 2, 3	S11.03
4/22	Pharmacotherapy: Osteoarthritis *	Bratteli	1, 2, 3	S11.02
TBD	Cumulative Final Exam (+ new material 3/29 through 4/22)			
*Indicates intended dates of iRATs				

