

PHAR 7288
Hematology and Oncology
Spring Semester 2025

Course Description

This course integrates knowledge of pathophysiology, pharmacology, and pharmacotherapy to make appropriate treatment recommendations for specific hematological and oncological disease processes.

Additional information about the course

Additionally this course reviews cancer biology and the medicinal chemistry and pharmacology of the agents used to treat cancer and used in supportive care. An overview of surgery and radiation therapies used to treat specific cancers is reviewed at a topical level. The course also looks at psychosocial dynamics that can complicate treatment. It is expected that students will be able to seamlessly integrate knowledge attained in previous courses when presented complex problems in this course.

Course Credit

2 credit hours

Pre-requisites / Co-requisites

Successful completion of the P2 year or equivalent.

Class meeting days, time, and location

Didactic- Monday

10:00 am – 11:50 am.

W.T. Brookshire Hall # (additional rooms TBD)

Examination Reviews/Examinations

TBD

Course Coordinator

Bradley J. Brazill, BS Pharm, Pharm.D.

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Phone Number: 903-566-6100

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Office hours: Wednesday's from 10:30 am - 12:30 pm or by appointment.

Instructor

May Abdelaziz, BPharm, MS, Ph.D.

W.T. Brookshire Hall, Office #368

Phone Number: 903-566-6231

E-mail: mabdelaziz@uttyler.edu (preferred method of contact).

Office hours: TBD or by appointment.

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 Textbooks

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. Primary literature, when required will be posted as a PDF on the CANVAS site for this course.

1. Zeind CS, Carvalho MG, Cheng JW, Zaiken TL. *Applied Therapeutic: The Clinical Use of Drugs*, 12th edition, volume 2. Wolters Kluwer, 2023. (LWW Health Library)
2. Katzung BG, Vanderah TW. eds. *Basic & Clinical Pharmacology, 15e*. McGraw Hill; 2021 (Access Pharmacy)
3. Graham P. *An introduction to Medicinal Chemistry*, 6th edition. Oxford University Press, 2020. (Muntz Library)

Recommended supplemental materials

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

1. Loscalzo J, Fauci AS, Kasper DL, Hauser SL, Longo DL, Jameson J, eds. *Harrison's Principles of Internal Medicine, 21e*. McGraw-Hill, 2022. (Access Pharmacy)
2. Bruton LL, Knollmann BC. eds. *Goodman & Gillman's: The Pharmacological Basis of Therapeutics*, 14th edition. McGraw-Hill, 2023. (Access Pharmacy)

Course format

The delivery of the course material is determined by the content expert and may include, but not limited to, the following activities:

1. Lecture
2. Seminar
3. Independent study of selected readings
4. Active learning
5. Case studies
6. Educational videos

CLOs	PLOs (1-12)	ACPE Appendix 1	ACCP Didactic Tool Kit	NAPLEX (1.A.1-5D)	MPJE (1.1-4.7)	Assessment Methods (1-13)
1. Select appropriate medication therapy for treatment of specific cancers and supportive care based on principles of physiology, pathophysiology and pharmacology.	1,2,5,11	7, 15, 16, 28, 33, 34, 35	Anemias Drug-induced hematologic disorders Coagulation disorders Platelet disorders Infections in immunocompromised patients		N/A	1
2. Formulate patient-and disease-specific care plans for pharmacotherapeutic regimens in oncological disorders.	1,2,5,11	7, 15, 16, 28, 33, 34, 35	Pain, neuropathic & nociceptive Breast Cancer Lung Cancer Leukemia Oncologic emergencies Supportive Care		N/A	1
3. Design monitoring plans for efficacy, toxicity and adverse effects for pharmacotherapeutic regimens in oncologic disorders.	1,2,5,11	7, 15, 16, 28, 33, 34, 35	Diarrhea Nausea & vomiting, complex Pharmacokinetic and pharmacodynamic considerations		N/A	1

Course Summative Assessment Methods

Assessment/Examination Method	
1	Question-based examination (Paper and/or ExamSoft)

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 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 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 component	
Readiness Assessment, applications, and/or case submission.	10%
Major Assessments	
Exam 1 (weeks 1-5)	25%
Exam 2 (weeks 6-10 may include topics from weeks 1-4)	25%
Comprehensive Final Exam	40%
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	65-69.999%
F	<65%

Appropriate Use of Artificial Intelligence (AI)

For PHAR 7288, AI is not permitted for any aspect of this course. The work submitted by students in this course will be original material generated by themselves. This includes all process work, drafts, brainstorming artifacts, editing, and final products. This extends to group assignments where students must create collaboratively create the project. Any instance of the following constitutes a violation of UT Tyler's Honor Code: a student has another person/entity do any portion of a graded assignment, which includes purchasing work from a company, hiring a person or company to complete an assignment or exam, using previously submitted assignment and/or using AI tools (such as ChatGPT).

Attendance

To **receive full credit** a student **must attend all class session**, each unapproved absence may result in a 5% reduction in a student's individual component of the course grade. Students can request an excused absence.

Phones

Students are required to have computers and/or tablets which will be used to complete and submit assignments, phones are not required and shall not be used during class time and shall be stored in the students' backpack/bag.

Week	TOPIC	Instructor	CLO
1	The Blind Man and the Elephant (Reflection paper)	Brazill	1/13
2	Essential Cancer Biology Essential Pharmacology & Toxicology of Agents Used to Treat Cancer-I	Brazill	1/20
3	Essential Pharmacology & Toxicology of Agents Used to Treat Cancer-II	Brazill	1/27
4	Essential Pharmacology & Toxicology of Agents Used to Treat Cancer-III	Brazill	2/3
5	Essential Medicinal Chemistry of Agents Used to Treat Cancer	Abdelaziz	2/10
6	Essential Oncological Emergencies	Brazill	2/17
	Examination 1 (weeks 2-5)		2/24
7	The Approach to the Cancer Patient Essential Supportive Care-I	Brazill	3/3
8	Essential Supportive Care-II	Brazill	3/10
9	Lung Cancer	Brazill	3/17
10	Breast Cancer	Brazill	3/24
	Examination 2 (weeks 6-9)		3/31
11	Breast Cancer Case-Adult	Brazill	
12	Leukemia	Brazill	
13	Leukemia Case-Pediatric	Brazill	
14	TBD	Brazill	
15	Final	Brazill	