

University of Texas at Austin
College of Pharmacy
Fall, 2016

Course Title: Clinical Management of Drug-Drug Interactions

Course Number: PHR 361J (Unique # 58284)

Credit Hours: 3

Location: E-RAHC/Procedures Room

Faculty: Dr. Yasar Tasnif
ERAHC 1.100.8
(206) 407-8395

Meeting Times: TBA

Office Hours: Office hours will vary, so please make arrangements with faculty to schedule time to meet.

Course Description:

This three hour course is designed to provide the student with an understanding of clinically relevant drug-drug interactions, the significance and clinical management. Students will be working directly with the instructor of this course in a small group discussion based environment to promote learning.

Pre-Requisites for this Course:

Prior approval of the course instructor is required to register. Course may be repeated for credit.

Course Objectives:

Students will be expected to complete book chapter readings, assignments, and journal article assessments. Course readings will be relevant to the pathophysiology of drug absorption, metabolism, bio-transformation, excretion, and interactions. Readings will also include case reports, guidelines and position statements regarding drug-drug interactions. Students will be expected to take an active part in learning and teaching in this course.

Enrolled students will:

- Attend and actively participate in class and facilitate related activities
- Review and read course readings as assigned and be prepared to discuss and teach the group
- Identify a research question as assigned by the instructor and engage in literature review, and become familiar with research methodologies
- Prepare a poster presentation (ex. case study) and/or lecture on the a drug-drug interaction topic, and present this at a conference meeting or to faculty and students
- Participate in a debate on a topic determined by the instructor

Required Textbook:

The required textbook for this course will be *The Top 100 Drug Interactions: A Guide to Patient Management*, by Phillip D. Hansten, Pharm.D. and John Horn, Pharm.D..

Required Reading:

Students will also be assigned reading materials (textbook, journal, case studies or other materials) per instructor.

Suggested Reading:

Applied Clinical Pharmacokinetics, Larry Bauer (available online at the Clinic website, UT Austin).

Teaching Methods:

A variety of teaching methods may be employed including but not limited to discussions, lectures, case studies, demonstrations, audio-visual and on-line instruction. Students will also facilitate group discussions. Students are responsible for contacting instructors with questions or other academic needs pertaining to course materials. Clarification of course materials should be sought directly with the instructor.

Attendance Policy

Students are expected to meet with the instructor at least weekly on a routine basis. Meeting times are to be scheduled in advance with the instructor. Students are expected to participate in any group or web-based activities required by the instructor. The student will be held responsible for all course materials regardless of attendance. It will be left to the discretion of the instructor whether make-up opportunities will be made available for those who miss attendance or an associated activity. Any changes and or cancelations (other than emergencies) are to be made in advance and with the instructors consent. Request for excused absences should be made directly to the course coordinator. Instructors may make accommodations for students with approved absences.

Assessment

Student assessment will be evaluated by attendance in meetings with the faculty member, participation in assigned activities, completion of assignments, presentation, lecture, and debate.

Grading/Assessment Points

Attendance and Participation – 40%

Presentation/Poster and Debate – 40%

Completion of Readings/Research Assignments – 20%

Grading Scale

A 90-100% B 80-89%

C 70-79% D 60-69%

F ≤ 59%

Examinations

There will be no examinations. See Assessment for grading details.

Professionalism:

It is an expectation that all students will demonstrate professionalism in all aspects of this course. Respect for others should be demonstrated during discussions, and in completed assignments. Any conduct deemed unprofessional will be dealt with in accordance to policies of the College of Pharmacy and The University of Texas. Failure to act professionally could result in failure of this course.

Policy on Academic Dishonesty:

The "Statement on Scholastic Integrity of the College of Pharmacy" reads as follows:

"Pharmacy practitioners enjoy a special trust and authority based upon the profession's commitment to a code of ethical behavior in its management of client affairs. The inculcation of a sense of responsible professional behavior is a critical component of professional education, and high standards of ethical conduct are expected of pharmacy students. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including failure of the course involved and dismissal from the college and/or the University. Since dishonesty harms the individual, fellow students, and the integrity of the University and the College of pharmacy, policies of scholastic dishonesty will be strictly enforced in this class".

Students are expected to work independently. Any student suspected of dishonesty will be reported to the Dean of the College of Pharmacy and to the Dean of Students, as per University regulations. Students are expected to have read and understood the current issue of the General Information Catalog published by the Registrar's Office for information about procedures and about what constitutes scholastic dishonesty.

Policy concerning Accommodations for Students with Disabilities:

The University of Texas provides, upon request, appropriate academic accommodations for qualified students with disabilities. All University rules concerning accommodations must be followed, including the student arranging for special accommodations **prior** to the beginning of this course. In the absence of such prearrangement, it will be assumed that the student is not requesting special accommodations. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

Date	Topic (May be Adjusted as Determined by Instructor)	Presenter
Week 1	Introduction to Course: Syllabus review, expectations for the Course, and review of drug Information resources <ul style="list-style-type: none"> • Drug levels to ensure efficacy of narrow therapeutic index drugs 	Dr. Tasnif
Week 2	Organ systems overview: <ul style="list-style-type: none"> • Sites for drug-drug interactions (stomach, small intestine, liver, and kidney) • PK concepts and definitions such as AUC , drug exposure, MIC and therapeutic index 	Dr. Tasnif
Week 3	Interactions that can occur in the stomach <ul style="list-style-type: none"> • Chelation (Levaquin and divalent cations); PPIs and interactions with anti-malarials, HIV medications, and anti-Tb medications. • Clinical management of these interactions/Cases 	Dr. Tasnif/Student facilitation and Case Presentation
Week 4	Interactions that can occur in the small intestine <ul style="list-style-type: none"> • P-gp, CYP systems, enterohepatic recycling • Cyclosporine and ketoconazole; Digoxin and amiodarone interactions • Clinical management of these interactions/Cases 	Dr. Tasnif/Student facilitation and Case Presentation
Week 5	CYP System Interactions (3A4, 2C9, 2C19, 1A2) <ul style="list-style-type: none"> • Clinical management of these interactions/Cases 	Dr. Tasnif/ Student facilitation and Case Presentation
Week 6	CYP System Interactions (3A4, 2C9, 2C19, 1A2) <ul style="list-style-type: none"> • Clinical management of these interactions/Cases 	Dr. Tasnif/ Student facilitation and Case Presentation s
Week 7	Drug food interactions <ul style="list-style-type: none"> • Increase and decrease in absorption with food • Atovaquone • Itraconazole • Chocolate milk and cyclosporine • Cases 	Dr. Tasnif / Student facilitation and Case Presentation
	Thanks Giving Break	
Week 8	Enzyme affinity Substrate inhibition CYP3A4 <ul style="list-style-type: none"> • Ritonavir • Erythromycin • Grapefruit juice • Statins • Cases 	Dr. Tasnif/ Student facilitation and Case Presentation
Week 9	Induction <ul style="list-style-type: none"> • Rifampin, Phenytoin, Carbamazepine • Clinical management of these interactions • Cases 	Dr. Tasnif/ Student facilitation and Case Presentation
Week 10	Warfarin Interactions and management	Dr. Cruz
Week 11	Herbal and OTC Interactions	TBA
Week 12	Renal Dosing Debate and Topic Presentations	Student Presentations