

Clinical Pharmacokinetics Simulations Laboratory (PHR 171P)

Spring 2014

Laboratories - Monday* (1:00pm - 3:30pm)
Tuesday (1:30pm – 4:00pm)
Wednesday* (1:00pm - 3:30pm)
Thursday (1:30pm – 4:00pm)
Friday (1:30pm – 4:00pm)

(*Note: Time differences for Mon., and Wed., labs)

NOTE: You will receive an email in the next week or so indicating that a recording has been posted on Blackboard that provides a complete review of the syllabus and will detail the logistics of this course by the course director. You are required to review this recording before attending the first practice lab session in Feb., 17th, 2014.

ALSO NOTE: In order to allow the integrated kinetics course to provide enough basic concepts and necessary clinical background for these simulated exercises, labs will not start until the week of Feb., 17th (please refer to the lab schedule of page 6).

Course

Director:

Jim Koeller, M.S.
Pharmacotherapy
210-567-8355
210-240-3182 (cell – emergencies)
koeller@uthscsa.edu
Office hours – by appointment

Faculty:

Note: Individual laboratory TA's are listed below.

Course Goals:

The applied pharmacokinetics laboratory is meant to function as a simulation of what rounding with a healthcare team can beor functioning as a clinical pharmacist in a hospital rotation or health system job. This lab will provide the student an opportunity to put into practice and apply the fundamental pharmacokinetic principles and clinical insights taught in the integrated pharmacokinetic course but in more practical, everyday scenarios (real-world). Students will receive simulated, sequential clinical cases that will require the understanding and application of the basic principles taught in the integrated course. For a 4th year student on a medicine rotation or a pharmacist working in a health care system, it would not be unexpected for a member of the healthcare team to direct a drug dosing or drug change question to the pharmacist. In an actual situation, the pharmacist (ie., student) would either know the answer or

would indicate they will get back to the team shortly with an ‘answer’, at which time they would go to available references and calculate the dose, etc. In a ‘real-world’ scenario, it would not be unusual for a question to come up on a drug that you would not have an immediate answer for and then would have to go look up appropriate references and information to be able to provide an answer. As a pharmacist, you will not remember every drug and every recommended dose... Because you have not yet had all of pharmacotherapy, there is a very good chance that some of the drugs in the cases you will not be familiar with, so you will need to go and find specific drug information needed to be able to apply the basic kinetic principles to make drug dosing recommendations. These scenarios are what this lab is trying to simulate.

Course Texts: Pharmacotherapy Dipiro 8th Edition, McGraw Hill, 2008
 Basic Pharmacokinetics, 2nd Edition, Sunil Jambhekar, Philip Breen, Pharmaceutical Press, 2012.

Web Resources: 1. The *official Blackboard® web site* for this course can be accessed either through UTDirect or via <http://courses.utexas.edu>. Either access point is UTEID-protected, and provides you links to the courses in which you are currently enrolled. You are strongly encouraged to visit this site for additional resources associated with this course (your grades, the discussion board, contacting faculty by Email, electronic versions of suggested and *required* readings and hyperlinks). The website will also be used for official, course-related announcements and for exchange of class information and questions via the discussion board. Be aware that any messages posted to the discussion board are available to all enrolled students and faculty.

2. You may also contact the course coordinator directly via **phone** or **Email for any and ALL issues related to this course.**

Jim Koeller, M.S. (210-240-3182) koeller@uthscsa.edu

3. Laboratories: Attendance in lab is **REQUIRED**. Also note that **Any Lab Changing or Missing Labs must be approved by the course director. TA’s will take attendance at each lab.**

Lab Sections: AUSTIN

Unique #	Day	Time	Location	TA
60965	Monday	1:00pm	PHR 2.208	Kelly Daniels-Case Instructor Young Cheun-On-site Monitor
60975	Tuesday	1:30pm	PHR 2.208	Sarah Villarreal-Case Instructor Judy Garza-On-Site Monitor

60970	Wednesday	1:00pm	PHR 2.208	Grace Lee-Case Instructor Judy Garza-Site Monitor
60980	Thursday	1:30pm	PHR 2.208	Natolie Boyd-Case Instructor Michael Reilly-Site Monitor
60985	Friday	1:30pm	PHR 2.208	Julieta Scalo-Case Instructor & On-Site Monitor

Note: Office hours by TA's will be set the first day of lab.

NOTE: All but the Friday lab will be transmitted to the Austin class room from San Antonio (where 4 of the TA's are physically located).

These Clinical Case Instructor TA's will be responsible for all cases, their grading, and any challenges. All Case Instructor TA's will be given instructor guides for each exercise to assist in grading consistency. Note: The on-site monitor TA's will be acting as the in-room lab monitor (Mond., through Thurs.) with the responsibility of collecting and handing out the sequential lab work sheets only (because the clinical TA is not on-site but in SA). However, the Case Instructor TA will be the TA in charge of these labs (except for Friday when there will be just one TA in Austin and they will handle both functions).

A specific progressive clinical case will have 3 problem sets of 2 questions each (for a total of 6 points) that will be provided to each student sequentially. Twenty minutes will be allowed for each student to provide their responses for each problem set. Following each problem set, the TA will use the next 20 min (if needed in total) to review the answers to the previous section. Students will be allowed to keep their answers during the 3 TA review periods. However, **all pens/pencils will need to be put away (so answers cannot be changed)**. The students will then hand in their answers to one problem set before the next sequential problem set is handed out.

NOTE: This is an OPEN BOOK lab, just as in a real clinical situation, you will be allowed to utilize reference materials.

Students will be allowed to bring in reference materials they deem necessary based on the drug(s) identified in the clinical case for that week. Students will not be allowed to leave the lab to obtain additional references. Laptops can be used for this course, but not phones of any type. For those using laptops, if at any time an email or social media screen is found 'open', your sheets will be collected and you will be asked to leave the class. If you complete a problem set before the required time has expired, you can utilize the internet or listen to music from you laptop, but just no email or social media can be used (or bring a medical journal to read in your 'extra' time...).

Examinations: There will be no examinations in the laboratory.

Exercise/Case Scoring:

Grading will be based on the sequential cases. Each question will be worth 2 points, which will be split between: A) having the correct answer; B) utilizing acceptable equations and correctly describing the answer. A standardized grading sheet will be used by the TA's. Note: Some questions may be split into more than one question, then the points will be divided accordingly. Graded cases will be available one week after the case for review by the student if they so request. Any reconsiderations need to be dealt with as described below.

Please note, since each section will be graded by different TA's, the Course Director will review the section percent totals and may proportionately adjust them to the same section mean percentage total. This will result in normalization of the grades between sections.

Reconsideration Requests:

If there is a disagreement over your case grade, the student should provide a copy of his/her unaltered exercise/case, plus a written explanation of their lab to their TA within one week of exercise/case return. If after review by the TA, an agreement cannot be reached, then those documents and the TA response should be forwarded to the course director for final determination.

Attendance:

Laboratory attendance is mandatory. The course director must be contacted the week prior to the change (email please) if a lab is to be moved or switched. Missing any lab will require TA notification, so an alternative lab for that week can be identified. An unexcused absence will result in a zero grade for that week's missed lab exercise. For special circumstances where no alternative lab for that week can be identified, these will be dealt with by the course director.

Dress Code:

Professional dress IS NOT required for these labs.

Grades:

Grades will be assigned to students based upon the percentage of total points earned in class according to the following:

90 - 100%	~	A
80 - 89.99%	~	B
70 - 79.99%	~	C
60 - 69.99%	~	D
<60%	~	F

**Academic
dishonesty:**

The “Statement on Scholastic Dishonesty 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 on all exercises. Any student caught cheating will be given a “zero” on the case (minimum). 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.

**Students with
Disabilities:**

The University of Texas at Austin 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 each examination*. In the absence of such *prearrangement*, the student will be assumed that the student is not requesting special accommodations for that exam, and will be expected to take the exam with the rest of the class at regularly scheduled exam time. For more information, contact the Office of the Dean of Students at 512-471-6259, 512-471-4641 TTY.

Laboratory Schedule

Week of	Laboratory topic
Jan., 13th	None
Jan., 20st	None
Jan., 27th	None
Feb., 3th	None
Feb., 10th	None
Feb., 17th	Practice Lab
Feb., 24th	Clinical Case #1 IV dose no distribution/renal elimination (tobramycin, piperacillin-tazobactam)
March 3th	Clinical Case #2 IV dose with distribution (digoxin)
March 10th	Spring Break - None
March 17th	Clinical Case #3 IV Infusion (theophylline)
March 24th	Clinical Case #4 Organ Dysfunction (digoxin)
March 31st	Clinical Case #5 Multiple Dosing (tobramycin)
April 7th	Clinical Case #6 (Vancomycin)
April 14th	Clinical Case #7 Non-Linear (phenytoin)
April 21nd	Clinical Case #8 Orals Antibiotics/Antidepressants/antipsychotics