

Fall-2016
Basic Principles of Medicinal Chemistry (PHR 180K)
-and-
Basic Principles of Medicinal Chemistry Lab (PHR 180P)

Schedule: Lectures, Tues 9-10 a.m. in PHR 3.106
Pre-Lab, Thurs 9-10 a.m. in PHR 3.106

Laboratory

Mon 3-6 p.m. in PHR 2.116
Tues 2-5 p.m. in PHR 2.116
Wed 2-5 p.m. in PHR 2.116
Wed 5-8 p.m. in PHR 2.116
Thurs 2-5 p.m. in PHR 2.116

Optional AA-led review Sessions will be announced

Faculty: Dr. Patrick Davis, Ph.D. (Med Chem), PHR 180K Course Coordinator
Dr. Walter Fast, Ph.D. (Med Chem), PHR 180P Course Coordinator
Dr. Alfred Tuley, Ph.D. Asst. Instructor alfred.tuley@gmail.com

Teaching Assts:

Ashley Jewett	BME 6.102	ajewe@utexas.edu
Olaf Bjornstal	BME 6.102	otbjornstal@gmail.com
Emily Lancaster	BME 6.308	emily.b.lancaster@utexas.edu
Alesha Stewart	BME 6/308	aleshastewart@utexas.edu
Aoshu Zhong	WEL2.204	aoshuzhong@utexas.edu

Academic Assistant: Lindsey Groff groff.lindsey@yahoo.com

Course Texts:

1. Foye's *Principles of Medicinal Chemistry*, 7th Ed., 2013 [required].
2. Lemke, *Review of Organic Functional Groups: Introduction to Medicinal Organic Chemistry*, 5th Edition, Roche & Zito, 2012 [required].

Note: Exam questions may come from assigned text readings.

Web Resources: 1. The Canvas® web site for this course is located at: <http://courses.utexas.edu/>

On login (with your UTEID) you will see a list of Canvas® websites for your current courses. Click on *F16 Basic Medicinal Chemistry Principles* to access the site. You are strongly encouraged to visit this site for additional resources associated with the courses (electronic quizzes, powerpoint presentation, previous exams, contacting faculty by Email, electronic versions of suggested and **required** readings). Messages sent to you via the Canvas® Website (Email and Notifications) are **official** mechanisms for communication in this course; be sure you understand the College Email policies.

- The **Discussion Board** for this course is also on the Canvas® website. The Discussion Board will be used for posting questions, exchanging class information, and making class announcements.
- Dr. Davis holds electronic office hours on Canvas® (Chat module) during his section of the course on Sunday nights at 9:00 p.m.
- You may also contact faculty members directly via **phone** or **Email** with questions or to set up an office visit.
Dr. Patrick Davis (475-9751; Home: 892-3660) davispj@austin.utexas.edu
Dr. Walter Fast (512-232-4000) walt.fast@austin.utexas.edu
- The molecular viewing software, UCSF Chimera, used in the lab portion of the course can be downloaded from the following site for Windows, Mac, or Linux platforms at no cost for noncommercial use. The program will also be installed on lab desktop computers: <http://www.rbvi.ucsf.edu/chimera/>

Basic Medicinal Chemistry (PHR 180K & 180P) Course Policies

1. Examinations:

There will be two 2-hr summary examinations throughout the semester, plus a comprehensive final administered during the Final Exam period. Summary Exams will cover both the lecture and the laboratory material, since the material is coordinated for reinforcement. Exams will be given according to the following schedule:

Exam Date & Time	Location	Coverage	Faculty	Points
Tues, Oct 11, 7-9 pm*	WEL 2.246	Lec: Princ Med Chem	Fast [5 lectures]	100 pts
Tues, Oct 11, 7-9 pm*	WEL 2.246	Labs: 1-4	Fast	80 pts
Tues, Nov 22, 7-10 pm*	WEL 2.246	Lec: Metabolism	Davis [8 lectures]	160 pts
Tues, Nov 22, 7-10 pm*	WEL 2.246	Lab: 5-10	Davis, Fast	120 pts
Final Exam*	TBA	Lec: Med Chem Prin Lec: Metabolism No Labs on Final	Fast Davis	100 pts

(*Dates/Times tentative pending input from your Pharmacy Council Representatives)

Course grades are thus based on the following:

180K: 260 pts (based solely on examinations)

180P: 270 pts (based on 180 exam pts and 90 pts from eight lab reports (11.25 points each). Nine lab reports will be assigned, but the lowest grade will be omitted (“dropped”). Since labs are difficult to make up, this drop can be used for an excused or unexcused absence but further absences will have to be addressed ahead of time with the TA assigned to your lab section to see if alternative days can be scheduled. [Note: Total possible points may be lower if a lab is canceled due to school closure, or if selected reports not assigned].

Lab reports will be due at the end of each lab session and will mostly take the form of short answer questions, although other formats will also be used. Although some lab exercises will be small group experiences, the lab report should be your own individual work, the same as with exams (below), unless specifically instructed otherwise.

The format for the exam is entirely the prerogative of the faculty. *Students must arrive on time for examinations.* All instructions and corrections will be made at the beginning of the examination period and will not be repeated. Semester exams will begin promptly at the designated hour and will be picked up after exactly 2 hrs. The final examination will last three hours. Students arriving after any students have completed the exam and left the room may not be allowed to sit for the exam and may receive a score of zero.

No allowances will be made for an exam being missed, other than documented illness or emergency. The student must contact the course coordinator for confirmation *prior to the exam.* If permission is granted to delay the exam, it is the student responsibility to complete the College Form titled “Student Request for Alternate Exam Time” for consideration and *final approval* by the Faculty member. In this event, the nature of the make-up will be at the discretion of the faculty (oral, written, increased weighting of the relevant section on the final, etc.). An unexcused absence from an exam may result in a grade of "zero" for that exam.

The grading of objective questions will be based upon the scantron sheets turned in, and *not* on answers written on the exam papers. After the exams have been graded and an item analysis performed (Measurement & Evaluation Center), acceptable answers may be broadened at the discretion of the faculty before exam grading is finalized.

2. Return of Exams; Posting Class Scores & Keys:

All summary examinations will be returned to the students within a reasonable time after taking the exam. Following the grading of each exam, scores and the exam key will be posted on the Canvas® site. An announcement will be made via the listserv that the key and scores have been posted and that exams are available for return.

3. Post-Exam Remarks and Reconsideration Requests:

If there is a disagreement over the answer to a specific question, the student should present his/her exam plus a written explanation (with appropriate documentation) to the instructor within 72 hours of the listserv announcement of the posting of exam results & key as described above. Documentation may include statements from textbooks, handouts, packets, or current scientific reprints; your lecture notes are *not* authoritative documentation. The explanation must be clear, rational, and concise. (This policy does not apply to addition or other grading errors). Faculty are instructed to wait until after the deadline has passed before responding to specific reconsideration requests, so be patient!

4. Final Exam Re-Examination Policy:

The re-examination policy for this course will follow the General Information Catalog (GIC) policy for the University, which reads as follows: "Only a student who has a grade average of at least a C on all class work and lab work submitted before the final exam may request a temporary delay of the final course grade because he or she failed the final examination, which is the examination given during the final exam period as printed in the official examination schedule. If the petition is denied by the instructor (i.e., course coordinator), the student's final course grade will remain as originally determined. If the petition is granted by the instructor (i.e., course coordinator), the grade on the reexamination will be **substituted** for the grade on the original exam in determining the student's final course grade, provided the student earns at least a C on the reexamination. **If the grade on the reexamination is less than a C, a final course grade of F must be recorded.**"

5. Course Grading 180K:

A Range:		A = 100%-93%	A- = 92%-90%
B Range:	B+ = 89%-87%	B = 86%-83%	B- = 82%-80%
C Range:	C+ = 79%-77%	C = 76%-73%	C- = 72%-70%
D Range:	D+ = 69%-67%	D = 66%-65%	
F =	Below 65%		

180P:

A = 100%-90%
B = 89%-80%
C = 79%-70%
D = 69%-65%
F = Below 65%

This scale may be curved more leniently in the final analysis of grades at the discretion of the instructors.

6. Academic Integrity:

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 examinations and on all lab reports (unless specifically instructed otherwise). Any student caught cheating will be given a "zero" on the assignment (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 are also expected to be familiar with and abide by the College Honor Code, and will be expected to sign the Honors Statement at the end of each examination.

7. University of Texas Student Honor Code

As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity. <http://www.utexas.edu/about-ut/mission-core-purpose-honor-code>

8. Oath of Pharmacist¹

Students are required to adhere to the principles that guide our profession including the oath taken by all pharmacist practitioners.

“At this time, I vow to devote my professional life to the service of all humankind through the profession of pharmacy.

- I will consider the welfare of humanity and relief of human suffering my primary concerns.
- I will apply my knowledge, experience, and skills to the best of my ability to assure optimal drug therapy outcomes for the patients I serve.
- I will keep abreast of developments and maintain professional competency in my profession of pharmacy.
- I will maintain the highest principles of moral, ethical, and legal conduct.
- I will embrace and advocate change in the profession of pharmacy that improves patient care.
- I take these vows voluntarily with the full realization of the responsibility with which I am entrusted by the public.”

9. University of Texas Code of Conduct

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

<http://www.utexas.edu/about-ut/mission-core-purpose-honor-code>

10. Campus Carry

Students should familiarize themselves with the information provided by the University regarding the implementation of “Campus Carry” legislation. You will find an information sheet specifically for students (as well as sheets for parents, visitors, faculty, and staff) at <http://campuscarry.utexas.edu/info-sheets>.”

11. 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 expected to take the exam with the rest of the class at the regularly scheduled exam time. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

¹Developed by the American Pharmaceutical Association Academy of Students of Pharmacy/American Association of Colleges of Pharmacy Council of Deans (APhA-ASP/AACP-COD) Task Force on Professionalism; June 26, 1994 American Association of Colleges of Pharmacy 1426 Prince St. Alexandria, VA 22314 Phone: (703) 739-2330 Fax: (703) 836-8982
Email AACP

**Schedule of Basic Principles Medicinal Chemistry (PHR 180K)
-and-
Basic Principles of Medicinal Chemistry Lab (PHR 180P).**

Note: Revised 6/20/16

Week	Inclusive Dates Lab Scheduled	Tues Lecture Topic Thurs Pre-lab Topic Thurs Quiz Topic
1	Aug 24-26 No Lab (partial week)	Lec: None <i>Pre-Lab 8/25: Fast (Princ Med Chem Lab #1)</i>
2	Aug 29-Sept 2 Lab 1: Princ Med Chem #1	<i>Lecture 8/30: Fast (Principles of Med Chem)</i> <i>Pre-Lab 9/1: Fast (Principles of Med Chem)</i>
3	Sept 5-9 No Lab (Labor Day)	<i>Lecture 9/6: Fast (Principles of Med Chem)</i> <i>Pre-Lab 9/8: Fast (Princ of Med Chem Lab #2)</i>
4	Sept 12-16 Lab 2: Princ Med Chem #2	<i>Lecture 9/13: Fast (Principles of Med Chem)</i> <i>Pre-Lab 9/15: Fast (Princ of Med Chem Lab #3)</i>
5	Sept 19-23 Lab 3: Princ Med Chem #3	<i>Lecture 9/20: Fast (Principles of Med Chem)</i> <i>Pre-Lab 9/22: Fast (Princ of Med Chem Lab #4)</i>
6	Sept 26-30 Lab 4: Princ Med Chem #4	<i>Lecture 9/27: Davis (Drug Metabolism)</i> <i>Pre-Lab 9/29: Fast (Macromolecule Lab #1)</i>
7	Oct 3-7 Lab 5: Macromol Lab #1	<i>Lecture 10/4: Davis (Drug Metabolism)</i> <i>Pre-Lab 10/6: Fast (Macromolecule Lab #2)</i>
8	Oct 10-14 Lab 6: Macromol Lab #2	<i>Lecture 10/11: Davis (Drug Metabolism)</i> <i>Pre-Lab 10/13: Fast (Macromolecule Lab #3)</i>
Exam 1 on Tues, Oct 11 covering Weeks 1-5 (Fast) and Labs 1-4 (Fast)		
9	Oct 17-21 Lab 7: Macromol Lab #3	<i>Lecture 10/18: Davis (Drug Metabolism)</i> <i>Pre-Lab 10/20: Fast (Macromolecule Lab #4)</i>
10	Oct 24-28 Lab 8: Macromol Lab #4	<i>Lecture 10/25: Davis (Drug Metabolism)</i> <i>Pre-Lab 20/27: None</i>
11	Oct 31-Nov 4 No Lab	<i>Lecture Nov 1: Davis (Drug Metabolism)</i> <i>Pre-Lab Nov 3: Davis (Metabolic Pathways)</i>
12	Nov 7-11 Lab 9 Metabolic Pathways	<i>Lecture Nov 8: Davis (Drug Metabolism)</i> <i>Pre-Lab Nov 10: Davis (Liver Game Lab)</i>
14	Nov 14-18 No Lab	<i>Lecture Nov 15: Davis (Drug Metabolism)</i> <i>Pre-Lab Nov 17: Davis (Concept Mapping Lab)</i>
13	Nov 21-23 No Lab: Thanksgiving week	<i>Lecture Nov 22: Davis (optional review)</i>
Exam 2 on Tuesday Nov 22nd covering Weeks 6-13 (Davis) and labs 5-9 (Fast/Davis)		
15	Nov 28-Dec 2 No Lab (last week)	<i>Lecture 11/29: Review for Final Exam (Davis & Fast)</i>