

Chem 5, Fall 2014 — General Information

Please read all of the following and ask if something's not clear!
In particular, read the section on the Honor Principle closely!

Web Site

The URL <http://www.dartmouth.edu/~genchem> will take you to the home page for the course web site. (We will *also* use Canvas.) A pdf version and a web page version of this handout are both on this site. The web page includes links to other information of interest right off the bat.

People, Places, Things

INSTRUCTOR: John Winn, 204 Burke

CLASS TIMES: 10 hour: M, W, and F, 10:00 - 11:05; X-hour, Th 12:00 - 12:50, 006 Steele Hall. X-hours will be used for problem discussion sessions as well as additional lectures as warranted. See the course calendar and syllabus (on Canvas and the web site) for more details about class meeting times throughout the term.

EXTRA RESOURCES: In addition to my own office hours (see below), we will use both the course Canvas site and the GenChem web site. These sites will be the place to go to pick up the weekly problem set, find out what the text reading is for any lecture, and to communicate via announcements I may make from time to time as well as via comments, questions, and anything else relevant you might want to say through the Piazza app hooked into Canvas. We will also have help from a Teaching Fellow sponsored by the Dean of Faculty office and the Health Professions Program office. He is Rui Shu, a chemistry major who graduated last year and is spending this year working in this brand-new Teaching Fellows program. Rui will attend our lectures, hold office hours (Sunday, 2 - 4 PM and Monday, 6 - 8 PM, both in 315 Steele Hall), and serve as a liason between our course and the Academic Skills Center Study Groups.

OFFICE HOURS: Wednesday, 1:30 - 3:00 and Friday, 12:30 - 2:00 in **220 Burke**; or by appointment. If you do need to see me, however, to discuss some particular aspect of the course, your performance in it, or any other matter best discussed between the two of us, either see me after class or blitz me, suggesting a time or two that works for you. I will check my schedule and get back to you as soon as I can. Please ask if you need help, and see below about my BlitzMail policy.

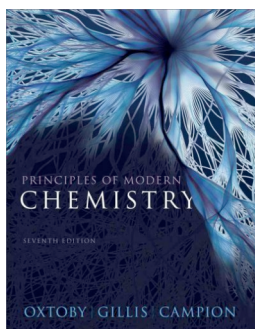
In addition to these times, primarily designed for help with material directly related to the lecture portion of the course, your lab TA will describe the office hours designed for the laboratory portion of the course. And don't forget about our Teaching Fellow, Rui Shu, mentioned above!

BLITZMAIL POLICY: We all love BlitzMail. But it is not the medium to answer specific technical questions, such as "How do you work the third homework problem?" On the other hand it is an ideal way for us to keep in touch outside class time. I may blitz info to all of you from time to

time (or contact you through Canvas), and you should feel free to blitz me whenever you'd like to set a time to meet in person, whenever you will miss an important class event, etc.

LABORATORY: The Laboratory Important Information sheet provides details about the lab. Please read it carefully. Failure to complete the laboratory portion of the course can result in failing the entire course no matter what your exam performance has been. You must purchase a copy of the lab manual and a pair of safety glasses before your first lab. Notebooks will be provided. Labs start Monday, January 22. Visit the lab's web site for details.

REQUIRED TEXTS: Principles of Modern Chemistry, 7th Edition, by Oxtoby, Gillis, and Campion, plus Student Solutions Manual, 7th Edition, by Freeman.



ADDITIONAL READING: A selection of general chemistry texts (including our required text) is available on reserve in Kresge Library. You may find it helpful to read appropriate sections in one or more of these on occasion, and all of them are good sources of extra problems to do and solved exercises to study.

Grades

BIG EXAMS: There will be three major exams during the term, including the final exam. The exams are closed book, and you will need an electronic calculator, defined here as "a device that can do numerical computations but nothing else: no smartphones, iPads, etc." Graphing calculators, though unnecessarily fancy, are OK. The exams will be held in 006 Steele (probably - the final exam location is not yet known for sure). Each will focus on the material covered in lecture since the previous exam. Exams 2 and 3 will not be "cumulative," except that they will, of course, require you to have mastered all of the material that precedes them.

Exam 1: (100 points) Thursday, October 9, 7:00 – 10:00 PM

Exam 2: (100 points) Thursday, October 30, 7:00 – 10:00 PM

Exam 3: (100 points) Tuesday, November 25, 8:00 – 10:00 AM

LITTLE EXAMS: Every week, starting with the second week of the term (September 22-24), you will have a quick (typically just one problem) test/quiz/mini-exam before you start your lab exercise. These little tests will follow the lab lecture you will all attend at 2 PM, the start of lab, in 006 Steele Hall, but will actually take place in your lab room itself on the third floor of Steele. You will be given the week's test, which will focus on the previous week's lecture material, and you'll have about ten minutes to work it. Then, you'll turn in your answers and get together with your fellow students in groups of three or four to discuss the problem: what was your approach to its

solution? Finally, the whole lab room will discuss the problem. Your lab TA will quickly grade your work (with a grade of "OK" or "Ooops!"), and return it to you by the end of the lab. Your result will be recorded, but, as described below, these tests will not strongly affect your grade except that they will be yet one more way to help you stay on top of the material! Similarly, the weekly problem sets described below will help you keep up with the course.

HOMEWORK: Problem solving is important! Typical practice problems will be assigned each week, and some of them along with others will be done during the lectures and X-hours. If you fail to work at these on your own, you will find the exams very difficult! **Homework will not be turned in or graded**, but you will find it very good preparation for the exams. The Solutions Manual provides detailed answers for the odd-numbered problems — additional solutions to the 'Lecture Problems' will be posted on this web site. *Please note that carefully reading the solutions, although useful, is no substitute for doing the homework yourself.* **It is vital that you attempt all the assigned problems.** You cannot wait until the last minute to try to master this material. If you find you are having difficulty with the problems, see me as soon as possible so that we can work together on them.

GRADES: The course grade will reflect your exam performance (300 points total), your lab performance (70 points total, or 17.5% of the course), and the qualitative total grade on your lab weekly quizzes (30 points, or 7.5% of the course). The historic GPA for this course is 2.9 to 3.1 with a median course grade of B. History can be expected to repeat itself.

OTHER SOURCES OF HELP: The following resources, not associated with the Chemistry Department, are available for help: Academic Skills Center Study Groups, and the Tutor Clearing House of the Academic Skills Center. The Center is located in 224 Baker Library.

Ethics

DISABILITIES: Any student with a physical or learning disability or a chronic health problem for whom special accommodations would be helpful is encouraged to discuss with me the types of assistance I might be able to offer.

RELIGIOUS OBSERVANCES: Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me before the end of the second week of the term to discuss appropriate accommodations.

HONOR PRINCIPLE: It is vital that you understand the role of the Dartmouth Academic Honor Principle in all aspects of this course. Please inquire if you have questions or feel you need clarification on any of the following explicit dictums of the Honor Principle for this course. In particular, you should be aware that the Honor Principle is a two-way agreement: you agree, by enrolling in Dartmouth, to uphold it, and I agree, by accepting employment on the Dartmouth Faculty, to enforce it. The course web site has a link to the Honor Principle that states our duties as faculty members. Read them. I will follow them if need be. Bottom line: a failing grade is always preferable to a trip before the Committee on Standards. *Don't screw up.* For this course, there are specific aspects of the Honor Principle you must keep in mind, reproduced below from the course web site:

Below are some specific ways that the Honor Principle applies to Chem 5 and Chem 6. Although some Honor Principle violations are given, this is not an exclusive list, nor is it meant to replace your judgment and integrity. Please feel free to inquire further if the statements below are not adequate.

Quizzes and Exams. Any of the numerous activities normally considered cheating are violations of the Dartmouth Honor Principle. Examinations and quizzes are not proctored; however, the professor will be present to answer questions that arise. Since exam graders sometimes make mistakes, claims of error in grading will be considered carefully. Changing a graded answer and returning the paper for re-grading is a direct and flagrant violation of the Honor Principle.

Laboratory. Honesty and integrity lie at the very heart of any experimental science, and the following remarks indicate how the Honor Principle applies to the laboratory work in Chem 5 and 6: Unless permission is granted by the instructor, use of another student's laboratory data is a violation. When use of another's data is allowed, the source of the data must be indicated. Fabrication of data or alteration of your own data to secure some desired result is also a violation. In the case of experiments where two students work together and data have been recorded in one student's notebook, a copy of the data may be made in the other student's notebook with an appropriate citation to the location of the original data. Other material in the notebook that has been copied from any source whatever must be provided with a source citation. Laboratory reports must represent your independent calculations and individual conclusions, although comparison of numerical results with those of another student is permitted. Direct copying of any portion of another student's lab report is a violation of the Honor Principle.

Problems. Working ungraded homework problems is excluded from Honor Principle constraints. It is helpful for many students to work problems collaboratively. Whether working independently or with a partner or group, you are encouraged to tackle each problem independently until the point is reached where further time and effort seem futile. At that point, examination of the answer key or study guide is encouraged. You should also work problems independently, so you do not rely too heavily on a group or partner. Remember that exams will include problems and are taken independently.

Course Material. Denying other students access to course material is a violation of the Honor Principle. This includes removing or altering course material on reserve in Kresge Library.

Special Note to Students Repeating or Re-enrolling in Chemistry 5 or 6: The Department of Chemistry views each enrollment in Chemistry 5 and 6 as an enrollment in a new course. As such, it is a violation of the Honor Principle to submit any graded material that was previously submitted in an earlier enrollment in Chemistry 5 or 6. Likewise, *all* labs must be attended and attempted at each enrollment in Chem 5 or 6.

Violations of the Academic Honor Principle are taken very seriously. There have been cases involving students in Chem 5 and 6 that have resulted in severe penalty, including suspension. Note that the Honor Principle not only prohibits the kinds of activities described above, but also requires *you* to take some action should you suspect that someone else in the class is violating the Honor Principle. See the Student Handbook or the Academic Honor Principle website for further information.