

Chemistry 0120/0420: General Chemistry 2 Section 1200 Syllabus Summer 2018

Instructor: Dr. David Ewing

Lecture: MoTuThFr 12:30 – 2:15 pm
154 Chevron Science Center

Office: 606 Chevron Science Center

Contact: [dwewing@pitt.edu](mailto:dewing@pitt.edu) Email will normally be answered within 24 hours.

Office hours: TuFr 10:30 am – noon, We 10:30 - 11:30 am, and by appointment. The instructor will also be available after most classes.

Recitation Teaching Assistants: Kaye Archer kaa82@pitt.edu (Section 1210)
Wei Chuen Chan wlc12@pitt.edu (Section 1215)
Brenda Ho brh118@pitt.edu (Section 1220)

Laboratory Teaching Assistants: Thomas Deering tjd67@pitt.edu (Section 1210)
Chao Zhang chz62@pitt.edu (Section 1215)
Genevieve Weist weist@pitt.edu (Section 1220)

Course description:

Chemistry 0110/0410 and 0120/0420 comprise a two-term introduction to the discipline. This term we will cover solutions, kinetics, chemical equilibria, acid-base chemistry, thermodynamics, electrochemistry, nuclear chemistry, transition metal complexes, and an introduction to organic chemistry. This corresponds to chapters 12-19, 20 (selected topics), 22 (selected topics), and 23 of the textbook.

Books:

General Chemistry, 11th ed., Ebbing and Gammon (Cengage Learning, 2017) - **required**

Chemistry 0120 Lab Manual 2017-2018 (University of Pittsburgh, 2017) – **required** – available in the Bookstore

Student Solutions Manual for Ebbing/Gammon's General Chemistry, 11th ed., David Shinn (Cengage Learning, 2017) - **optional**

Study Guide for Ebbing/Gammon's General Chemistry, 11th ed., Larry K. Krannich (Cengage Learning, 2017) – **optional**

The optional books are also on reserve in the Chemistry Library (first floor of Chevron Science Center, first hallway off the main entrance).

Electronic Resources:

CourseWeb: Course information will be posted at <https://courseweb.pitt.edu>. This will include announcements, lecture notes, homework assignments, your scores, class schedule, and this syllabus - updated as needed. The lab has its own CourseWeb site.

Sapling Learning: Sapling is an electronic homework/learning system. For each chapter in the textbook electronic homework will be assigned. **This homework will be graded** and will count for 10% of your overall course grade. You will get 3 attempts at each problem/question. There is no penalty for not getting the first two attempts correct. Use the hints and/or tutorials to help you get the correct answer. There is no penalty for doing so.

Sapling homework due dates are given with each chapter assignment. They will typically be every Wednesday and Sunday at 11:59 pm. To help you balance your time and to have time to get help, these due dates are usually a couple/few days after the quiz or exam on each chapter, but it's best to try to get all homework done pertaining to a given quiz or exam beforehand.

There are a few quirks in the Sapling system, so it may, very occasionally, say you got the wrong answer when you in fact got it right. If you document this your grade will be adjusted. You can work with other students on homework assignments. Many people find this a good way to learn, learning from each other. You can also get help from the Instructor, your Teaching Assistants (TAs), and tutors (see below) on Sapling and textbook homework.

To sign up for Sapling go to the Sapling folder under Course Documents in CourseWeb, and click on the file "Register for Sapling". The cost is \$38. You will have a 7 day grace period before this fee is due.

If you're having trouble getting Sapling to work, make sure you have an up-to-date version of Flash Player. You can also try using a different Browser. There is a list of suggestions on CourseWeb in the file "Student Help", in the Sapling folder under Course Documents.

Sapling support: <https://community.macmillan.com/docs/DOC-6915-students-still-need-help>

Other needed items:

Calculator: You will need a scientific calculator for homework, quizzes, exams, and labs. The calculator cannot connect to the web. You may not use your phone as a calculator on quizzes or exams.

Safety goggles: for lab – available in the Bookstore

Laboratory and Recitation:

There is a 4 hour per week lab period that is part of this course. The lab grade will contribute 15% to your overall course grade. You will get details about the lab at your first lab meeting. If you are retaking this course and previously earned 70% or better in the lab portion of the course, you may not have to retake the lab. You must fill out a "Credit for Lab for Repeaters" form, available in the Chemistry Undergraduate Office (Chevron 107), and turn that in at Chevron 107. If approved, your previous lab grade will be used this term in the calculation of your course grade. If you are in CHEM 0420 you must fill out the "CHEM 0410/0420 Student Responsibilities" form, available in Chevron 107, and give a copy to Dr. Ewing.

You are responsible for coming to lab prepared. This includes bringing your lab manual and safety goggles. In addition, you should be dressed appropriately for lab. This means you need to wear long pants (that go past your ankles), a shirt that covers your entire torso, and shoes that completely enclose your entire foot. In other words, no skin on your torso, legs, or feet should be visible.

The first hour of each lab period will be a recitation, a time where we will review lecture topics in a small class setting. **Please bring your textbook to recitation.** A graded quiz will be taken at the beginning of most of the recitations, as noted on the class schedule. You must attend the entire recitation to get credit for the quiz. You should also attend the recitations that do not have quizzes, to get the benefit of reviewing the material covered in lecture. CHEM 0420 students must attend recitation. The labs and recitations are taught by TAs.

How to do well in this course:

To do well you should come to all lectures, recitations, and labs. What's done in these three components of the course reinforce each other. Read the textbook. Done right this is a slow process – there is a lot of information packed into a science textbook. Come prepared for lab. Do the homework, do the homework, do the homework! You can't just look at worked out solutions to the homework problems – you must struggle through them. That's how you will internalize the material. While you will need to memorize a few things, understanding the material is the goal. Trying to memorize everything won't work well.

Ask questions when you need to. There is plenty of help available:

- Your lecture Instructor
- Your Recitation and Lab TAs
- Peer tutoring (FREE): See <https://www.asundergrad.pitt.edu/student-toolkit/peer-tutoring/drop-tutoring-schedule>

Many students also find it beneficial to form informal study groups.

Grading policies:

The 7 highest quiz scores (of 8) will count toward your grade. If you miss a quiz that will be the dropped score. **No make-up quizzes will be given** due to the time constrictions of the summer term.

There are no make-up labs due to the time constrictions of the summer term.

There are no make-up exams. If you miss an hour exam your final exam grade will be prorated accordingly. If you know you will miss an exam for a valid reason, or if an emergency situation caused you to miss an exam, talk to the instructor as soon as possible. In exceptional, documented circumstances an exam may be taken early, at the discretion of the Instructor.

If you feel something on an exam was graded incorrectly you have the option for a regrade. You must submit a Regrade Request Form, available on Courseweb, and the exam in question,

within two class days of the graded exam being returned to you. The entire exam may be regraded, so it is possible you could end up with a lower score than you originally received.

Course grades will be determined as follows:

Hour exams	100 pts. each = 200 pts.
Final exam (cumulative)	150
Quizzes	100
Laboratory	90
Sapling homework	60
TOTAL	600 pts.

For CHEM 0420 students the total number of points is 510.

A+ = 97-100%	B+ = 87-89%	Similarly for the C and D ranges
A = 93-96%	B = 83-86%	
A- = 90-92%	B- = 80-82%	Minimum passing grade is 60%

All exams will consist of a mixture of multiple choice and short answer questions/problems. You will have 1 hour and 15 minutes to complete Exam 1 and Exam 2. The final exam will take the entire period, and will be cumulative, with emphasis on material covered since Exam 2. Quizzes will consist of a couple/few multiple choice questions and one or two problems, and are to be completed in 15 minutes. **The final exam for this class will be on Friday, August 3, during the regular class period, in Chevron 154.**

There is no extra credit available for this course.

Other policies:

Homework from the textbook will be assigned, in addition to the Sapling homework. These will typically be all odd numbered problems in the "Practice Problems" section at the end of each chapter. Exceptions to this will be posted on CourseWeb. The textbook homework will not be graded but you should do these as well as the Sapling homework in order to master the material and do well on quizzes and exams. The assigned textbook problems have answers in the back of the book. You will get a worksheet on each chapter in recitation. These will help you get ready for exams. You are also encouraged to do more, unassigned problems as time allows.

Attendance will not be taken in lecture or recitation. However, research has shown that students who attend all class and recitation periods do better than those who do not.

Attendance in lab is required.

Please be respectful of your colleagues. There will be no talking (unless we are doing in-class problem solving), no eating, and no drinking in the lecture hall. If you have to come late or leave early, or leave during lecture, use the back doors. Use of phones is prohibited.

The Instructor reserves the right to change this syllabus as needed, and will inform the class verbally and on CourseWeb of any changes.

Academic Integrity Statement: Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity will be required to participate in the outlined procedure. A minimum sanction of a zero score for the quiz, exam, or lab report will be imposed. See www.cfo.pitt.edu/policies/policy/02/02-03-02.html.

Disability Resources: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both the instructor and the Office of Disability Resources and Services as early in the semester as possible, 140 William Pitt Union at 412-648-7890 or <http://www.studentaffairs.pitt.edu/drs/>

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor. Any such recording, properly approved in advance, is limited to the student's own private use.

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