

Chemistry 0110/0410: General Chemistry 1 Syllabus Fall 2020

Instructor: Dr. David Ewing

Sections 1291/1050 Lecture: TuTh 6:30 – 7:45 pm **via Zoom**

Sections 1480/1030 Lecture: MoWeFr 3:25 – 4:15 pm **via Zoom**

Contact: dwewing@pitt.edu Email will normally be answered within 24 hours.

Office hours: ThFr 1-3 pm, and by appointment. The instructor will also be available after most lectures.

Recitation Teaching Assistants: Wade Schnorr wes77@pitt.edu We 1-2 pm ; Fr 11 am–noon
(with office hours) Jason Smith jts101@pitt.edu Tu 5:30-6:30 pm ; Fr noon–1 pm

Dr. Margaret Vines mav81@pitt.edu

Mo 12:00 pm - 12:50 pm Remote/Ashe Balcony

Th 4:30 pm - 5:20 pm Remote Only

Undergraduate Teaching Assistant: Samir Yellapragada sty8@pitt.edu

Help session: Th 11-1

Laboratory Teaching Assistants: Haoyuan Sun has150@pitt.edu

Dr. Margaret Vines mav81@pitt.edu

Yuyu Zhang yuz193@pitt.edu

Nazifa Tabassum nat73@pitt.edu

Donald Janda dcj20@pitt.edu

Jacob Beard jpb123@pitt.edu

Quin Letavic qel1@pitt.edu

Philip Palermo pnp13@pitt.edu

Yijun Chen yic124@pitt.edu

Course description: Chemistry 0110/0410 and 0120/0420 comprise a two-term introduction to the discipline. CHEM 0110 covers: measurement; atoms, molecules, and ions; stoichiometry; thermochemistry; the electronic structure of atoms and molecules; gases, liquids, and solids. We will cover the first 10 chapters of the textbook, in order, in CHEM 0110.

Textbooks:

Chemistry 2e, OpenStax (Rice University, 2019) – **required** – available at no charge

<https://openstax.org/details/books/chemistry-2e>

Student Solutions Guide for the textbook – available at no charge on the textbook website

The laboratory manual and assignment templates will be distributed week by week on the Canvas lab site.

A couple collections of electronic chemistry textbooks are [Open Textbook Library](#) (the general chemistry books are toward the bottom) and [Chemistry LibreTexts](#) (use the Bookshelves option).

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

Gradescope: You will be uploading your completed quizzes and exams to Gradescope, an electronic grading tool.

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 feedback to help you get the correct answer. There is no penalty for doing so. 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 and your Teaching Assistant (TA) on Sapling and textbook homework. Sapling homework due dates are given with each chapter assignment.

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.

To sign up for Sapling go to <https://macmillan.force.com/macmillanlearning/s/article/Sapling-Learning-Registering-for-courses> The \$38 fee is due September 2.

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. Or visit the Support Community after logging into Sapling.

If you need direct assistance you can also contact technical support:
<https://macmillan.force.com/macmillanlearning/s/>.

Textbook Homework: Homework from the textbook will be assigned, in addition to the Sapling homework. These will typically be all odd numbered problems in the "Exercises" section at the end of each chapter. Exceptions to this will be posted on Canvas. The textbook homework will not be graded but you should do as many of these as possible, 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 and worked solutions available at the textbook website. You will get a worksheet on each chapter in recitation. These will also help you get ready for quizzes and exams.

Calculator: You will need a scientific calculator for homework, quizzes, exams, and labs.

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 (via Zoom), date and time TBA. The labs and recitations are taught by TAs. 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. To get approval to not take the lab you must submit a Lab Repeater Form, available soon on the lab Canvas site. If approved, your previous lab grade will be used this term in the calculation of your course grade.

Recitation will be held during the first hour of your lab period. Attendance will be taken. During the recitation period your TA will work with you on the recitation worksheet for the chapter we are currently covering in lecture. A quiz on that chapter will be released after the last recitation on Friday, and will be due Sunday night. You must scan your quiz answers as a pdf file and submit the file to Gradescope. If you don't have a scanner, common apps that will do this are GoogleDrive, CamScanner, or Adobe Scan Mobile. For instructions on submitting a file to Gradescope, see this tutorial: https://www.gradescope.com/get_started#student-submission ("For Students: Submitting PDF homework").

Zoom addresses for the recitation meetings will be listed in the Announcements section of Canvas.

CHEM 0410 students must attend recitation and take the quizzes.

How to do well in this course: To do well you should attend 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. Be prepared for lab and recitation. 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 (office hours on p. 1 of this syllabus)
- Your Recitation TA (office hours on p. 1 of this syllabus)
- The General Chemistry tutors (free) – office hours TBA

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

Grading policies:

There are no make-up exams. If you miss an exam for a valid reason 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 circumstances an exam may be taken early, at the discretion of the Instructor.

There are no make-up attendance grades, except for distant time zones, approved by the instructor.

Course grades will be determined as follows:

In-class exams	50 pts. each = 200 pts.
Practice final	50
Final exam (cumulative)	175
Quizzes	50
Laboratory	105
Sapling homework	70
Recitation attendance	25
Lecture attendance	25
TOTAL	700 pts.

For CHEM 0410 students the total number of points is 595.

The **tentative** grading scale for the course is as follows. The Instructor reserves the right to modify this scale, up or down.

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%

In-class exams will consist of a mixture of multiple choice and short answer questions/problems, and will be 30 minutes in length. Answers will be submitted to Gradescope as a pdf file, within the time allotted. The final exam will be cumulative and will be 1 hour and 30 minutes in length. Quizzes will consist of a couple/few multiple choice questions and one or two problems.

There is no extra credit available for this course.

The Instructor reserves the right to change this syllabus as needed, and will inform the class verbally and on Canvas 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/>

Use of Zoom recordings is limited to the student's own private use.

Material posted on Canvas is protected by copyright. In addition, University policy and procedures prohibit unauthorized duplication or retransmission of course material. Some materials posted on Canvas can be printed for your use. Posting materials from Canvas online is strictly prohibited.

Flex@Pitt Provisions:

1. The lecture portion of the course will be delivered, under all three postures, via remote instruction (as per the course's classification in PeopleSoft). Recitations and labs will be offered in-person for a rotating set of students each period as dictated by the Covid-era seat capacity and as allowed (i.e. in the Guarded Posture); the non in-person students for a recitation will participate synchronously through Zoom.
2. Under Guarded Risk posture in-person interactive activities include lab and recitation. These activities will be available to students participating remotely.
3. When the instructor is not physically present in the classroom, the instructor will be available via a monitor when teaching remotely.
4. Sessions conducted synchronously will be recorded for asynchronous viewing
5. This class will use Canvas and Zoom.
6. Class materials will be available via Canvas in any risk posture.
7. Office hours will be held as outlined in the syllabus. Office hours will be the same regardless of risk posture.
8. Grades will be assigned as outlined in the syllabus for any risk posture.
9. Any change in mode of instruction, or other course adjustments, will be posted on Canvas and announced in lecture.