Chemistry 0110: General Chemistry 1 Section 1170 Syllabus Spring 2018

Instructor: Dr. David Ewing Lecture: TuTh 8:00 – 9:15 am

Office: 606 Chevron Science Center L9 Clapp Hall

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

Office hours: TuTh 1:30 – 2:30 pm, W 2:00 – 4:00 pm, and by appointment. I will also be available right outside the lecture hall after most of our classes.

Course description:
Chemistry 0110/0410 and 0120/0420 comprise a two-term introduction to the discipline. This term we will cover: measurements; atoms, molecules, and ions; chemical formulas and equations; chemical reactions; gases; thermochemistry; quantum theory of the atom; electron configuration and periodicity; chemical bonding; molecular geometry; liquids and solids. This corresponds to chapters 1-11 of the textbook.

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

Chemistry 0110 Lab Manual 2017-2018 (University of Pittsburgh, 2017) – **required**

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).

Electronic Resources:
CourseWeb: Course information will be posted at https://courseweb.pitt.edu. This will include announcements, homework assignments, your scores, 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 one or more sets of electronic homework will be assigned, to be completed by the due date given. **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, if needed. There is no penalty for doing so.

There are a few quirks in the Sapling system, so it may, very occasionally, tell you got the wrong answer when you in fact got it right. Don't worry about this. Being 10% of your overall grade,

the online homework will improve your grade as long as you do all the problems and do them on time. Last semester most (76%) students in Ewing's CHEM 0110 sections got 90% or better on their Sapling grade. You can work with other students on homework assignments. Many people find this a good way to learn, learning from each other. And you can also get help from the professor, your Teaching Assistants (TAs), and other tutors 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 STUDENT INSTRUCTIONS TO REGISTER FOR SAPLING. The cost is $38 for the semester. You will have a 14 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. The Instructor has found that Internet Explorer works well with Sapling. There is also 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.

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. The first hour of each lab period will be a recitation, a time where you can review lecture topics in a small class setting. **Please bring your textbook to recitation.** A graded quiz will be taken at the beginning of many of the recitations, as noted on the class schedule. You must attend the entire recitation to get credit for the quiz. The labs and recitations are taught by TAs.

There will be no lab or recitation on Monday, January 15, as the University is closed for Martin Luther King, Jr. Day. If you have lab/recitation that day you will be excused. You will not be required to turn anything in for lab, but you should read Experiment 1 so you have that information. You should also do the recitation worksheet for that week on your own.

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 fight 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 TAs
- Tutoring on the 2nd floor Chevron Balcony (FREE): You may consult anyone on duty. A schedule will be available the second or third week of class and will be posted on CourseWeb.
- Peer tutoring (FREE): See https://asundergrad.pitt.edu/connected-community/peer-tutoring

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

Grading policies:

Only the 7 highest quiz scores (of 8) will count toward your grade. If you miss a quiz that will be the dropped score. If you know you will miss a recitation/lab for a valid reason, or if an emergency situation caused you to miss a recitation/lab, talk to your TA. It may be possible to attend a different recitation/lab section during the same week, or otherwise make up a quiz.

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 one week 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 =	300 pts.
Final exam (cumulative)	200
Quizzes	100
Laboratory	120
Sapling homework	80
TOTAL	800 pts.

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%

Hour exams will consist of a mixture of multiple choice and short answer questions/problems. The final exam will be all multiple choice. Quizzes will vary in format.

The final exam for this class will on Thursday, April 26, 10:00-11:50 am. The room will be announced when available.

Other policies:
Homework from the textbook will be assigned, in addition to the Sapling homework. 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 are also encouraged to do more, unassigned problems as time allows.

Attendance will not be taken in lecture or recitation. However, students who attend all class periods do better than they would if they did not attend. **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 or exam 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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