



Introductory Chemistry

Chemistry 1010 - 001 •
Dr. Harris
Fall 2009 Course Syllabus
8:30 – 9:20 a.m., MWF
Widtsoe 007
3 credits

Dates		MON	WED	FRI
August	24 th – 28 th	Introduction	1	1
August 31 st	September 2 nd – 4 th	1	2	2
September	7 th – 11 th	Holiday	2	3
September	14 th – 18 th	3	Exam 1 8:30 a.m. Widtsoe 007	4
September	21 st – 25 th	4	4	5
September 28 th – 30 th	October 2 nd	5	5	5
October	5 th – 9 th	6	6 Extra Credit Information	Exam 2 8:30 a.m. Widtsoe 007
October	12 th – 16 th	7	7	Thursday 15th - 8 Friday 16th – Fall Break
October	19 th – 23 rd	8	8	9
October	26 th – 30 th	9	9	Exam 3 8:30 a.m. Widtsoe 007
November	2 nd – 6 th	10	10	10
November	9 th – 13 th	11	11	11
November	16 th – 20 th	12	12	12
November	23 rd – 27 th	Exam 4 8:30 a.m. Widtsoe 007	Holiday	Holiday
November 30 th	December 2 nd – 4 th	13	13	13
December	9 th		Final Exam 7:30 a.m. Widtsoe 007	

Exam Number	Date	Chapters Included
1	Wednesday, 16 th of September	1 – 3
2	Friday, 9 th of October	4 – 6
3	Friday, 30 th of October	7 – 9
4	Monday, 23 rd of November	10 – 12
Final	Wednesday, 9 th of December	1 – 13

Dr. Doug Harris
Office: Widtsoe 335, (435) 797-1609
E-mail: doug.harris@usu.edu
Office Hours: 10:30 – 11:15 a.m. MW
SI Instructor: Nolan Carlile
E-mail: chem1010si@gmail.com
SI sessions: 4:30 – 5:20 p.m. M and 7:30 – 8:20 p.m. R. Both sessions will be held in Widtsoe 007.

Materials

John Suchocki, *Conceptual Chemistry*, 3rd edition (custom-published text), Benjamin Cummings, 2007.
Scientific Calculator (no cell phone calculators)
Course web site: <http://www.chem.usu.edu/~harris/>

Coursework

Examinations, 4 @ 100.....	400
Final Exam, comprehensive @ 100.....	100
TOTAL (drop lowest exam score).....	400

Grades

100% - 92%	A
91% - 88%	A-
87% - 85%	B+
84% - 81%	B
80% - 77%	B-
76% - 73%	C+
72% - 64%	C
63% - 60%	C-
59% - 57%	D+
56% - 50%	D

Note: Scores rounded to nearest one's place (91.4% = 91% and 91.5% = 92%).
The instructor reserves the right to lower these cutoff scores.

Policies and Procedures

1. The administration of Chemistry 1010 will adhere strictly to the policies outlined in the USU Fall 2009 Semester Schedule of Classes.
2. Qualified students with disabilities may be eligible for reasonable accommodations. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, 797-2444 voice, 797-0740 TTY, or toll free at 1-800-259-2966. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print or digital) are available with advance notice.
3. Except for school-excused absences and excessive finals (three or more) on one day, exams will not be rescheduled. The following procedure will be used to reschedule an exam due to a school-excused absence:
 - a. Obtain a letter from the respective academic advisor/director/supervisor excusing the student from the exam due to the school excused absence.
 - b. Before class begins, hand deliver letter to Dr. Harris 2 weeks **before** the scheduled exam time outlined in the syllabus.
 - c. Send an e-mail message to Dr. Harris 2 weeks **before** the scheduled exam time outlined in the syllabus listing the days and times that the student is available to complete the exam. The rescheduled exam must be completed **before** the scheduled exam time outlined in the syllabus.

The following procedure will be used to reschedule an exam due to excessive finals on one day:

- a. Obtain a copy of the official registration that is dated no more than 7 days prior to December 9th.
- b. Before class begins during no test week (December 2nd or December 4th), hand deliver the official registration to Dr. Harris.
- c. Send an e-mail message to Dr. Harris 2 weeks **before** the scheduled final exam time outlined in the syllabus listing the days and times that the student is available to complete the final exam. The rescheduled final exam must be completed **before** the scheduled final exam time outlined in the syllabus.

All exam rescheduling requests for absences that are not school-excused or have not followed the procedures described above will be directly referred to this policy without further discussion.

4. Keep in mind that the practice exam serves as an assessment of your understanding of concepts presented in lecture. Hopefully you will be diligent about following the suggested study plan outlined at the beginning of the course. Exam questions may be the same or similar to the practice exam problems but may also be completely different. Although exam questions may be completely different from the practice exam problems, all exam questions will focus on the concepts discussed in lecture.
5. Scantrons will be provided by the instructor.
6. When taking the exam, be sure to answer the problem and immediately fill out the corresponding scantron bubble. Avoid waiting to fill out your scantron sheet when finished with your exam.

7. Double check your scantron sheet before turning it in. Make sure that all of your answers have been entered the way you want them to appear on your scantron. Once an exam scantron is submitted, it may not be retrieved in order to make additions and/or changes.
8. Please arrive early to take the exam. Exams and scantron sheets will not be handed out after the first completed exam scantron sheet has been submitted. All requests for an exam and scantron sheet after the first completed exam scantron sheet has been submitted will be directly referred to this policy without further discussion.
9. Please set up your preferred e-mail account with IT services so that you will be able to receive your e-mailed exam results. It is also a good idea to make a print out of each exam's results so that you may track your progress in the course. Due to the confidential nature of grades, Dr. Harris will only send student grades by e-mail to a student's preferred e-mail account.
10. Although class attendance will not be officially taken, it will be absolutely essential that every effort is made in attending each lecture. All students will be held responsible for lecture material, worked problems, and/or course announcements that are presented in lecture.
11. If you choose to complete an optional extra-credit molecular modeling exercise, one percentage point (1%) will be added to your final grade percentage. This is helpful to those students who end up with a final borderline grade percentage. The extra-credit submission deadline will be at 8:30 a.m. Friday, October 30th when we meet to take the third exam. Further information will be given in class on Wednesday, October 7th regarding the specific details in producing the extra-credit assignment.

Course Objective and Assessment

1. The course will present chemistry *conceptually*, focusing on the concepts of chemistry with little emphasis on calculations. This presentation will hopefully improve each student's learning skills and assist in developing better thinking abilities (text page xix).
2. Lecture learning checks will be used as a means of assessing student comprehension. These student-centered learning strategies have previously proven successful in this chemistry course.

Some Learning Objectives:

- Become familiar with the basic physical quantities including mass, volume, energy, temperature, and density.
- Understand the fundamental concepts and language of chemistry including physical properties, chemical properties, elements, mixtures, compounds, and atomic structure.
- Understand how elements are organized in the periodic table.
- Understand radioactivity, three major radioactive products, and half-life of a radioactive isotope.
- Explore two types (ionic and covalent) of chemical bonds.
- Given a covalent molecular formula, predict the molecular structure.
- Describe the various types of intermolecular interactions.
- Gain an understanding of the macroscopic consequences of water's molecular structure.
- Gain an understanding of the basics of chemical reactions.
- Explore acids and bases and the chemical reactions they undergo.
- Gain a basic understanding of organic compounds.
- Gain a basic understanding of biomolecules.