

CHEM 1010 Introduction to Chemistry

Instructor: Douglas Harris

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Office Help: MW 10:30 – 11:15 AM or by appointment

Course Duration: 9th of January through the 1st of May, 2006.

Course Description: There are no prerequisite courses for Chemistry 1010. This course is designed for students that are non-chemistry majors and will be taught with a life science basis. 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 xvii).

Some Course 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.
- Explore the major categories of drugs and the methods used in developing new drugs.

Course Grading Policies: Your grade will be based on your performance with the following: four regular exams, the final exam (100 points each/drop the lowest exam score), and a 2 page drug report worth 50 points for a total of 450 possible points. The drug report will be due at 9:30 AM Monday, May 1st when we meet to take the final exam. Further information will be given in class on Wednesday, April 19th regarding the specific details in producing the 2 page drug report. Exam policies presented on Friday, January 27th, will be strictly followed for all four regular exams and the final exam. Except for school-excused absences, exams will not be rescheduled.

Grade Percentage:

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

Percentages rounded to the one’s place (91.4% = 91% and 91.5% = 92%).

Course Management: All supplemental materials for the class, syllabus, notes, sample exams, and related material will be available through the course web site at <http://www.chem.usu.edu/~harrisd/>.

The administration of Chemistry 1010 will adhere strictly to the regulations outlined in the Spring Semester 2006 Schedule of Classes.

Class Meeting Time: MWF 9:30 – 10:20 AM, ESLC 046

Required Text: “*Conceptual Chemistry*”, 2nd edition by John Suchocki (Publisher: Benjamin Cummins)

Required Supplies: Scientific Calculator (no cell phone calculators)

Course Credit Hours: 3.0

Chemistry 1010 Class Schedule:

Day	Date	Lecture	Sections
M	Jan. 9	1	Introduction/1.1
W	Jan.11	2	1.2-1.4
F	Jan. 13	3	1.5-1.6
M	Jan. 16	Martin Luther King Jr. Day	No Class
W	Jan. 18	4	1.7-2.1
F	Jan. 20	5	2.2-2.3
M	Jan. 23	6	2.4-2.6
W	Jan. 25	7	3.4-3.5
F	Jan. 27	8	Exam Policies and 3.6
M	Jan. 30	Exam 1	Lectures 1 – 8
W	Feb. 1	9	4.1-4.3
F	Feb. 3	10	4.4-4.5
M	Feb. 6	11	4.6-4.8
W	Feb. 8	12	4.9-4.10
F	Feb. 10	13	5.1-5.3
M	Feb. 13	14	5.4-5.6
W	Feb. 15	15	5.7-5.8
F	Feb. 17	16	6.1-6.3
M	Feb. 20	President's Day	No Class
T	Feb. 21	17	6.4-6.5
W	Feb. 22	18	6.6-6.7
F	Feb. 24	Exam 2	Lectures 9 – 18
M	Feb. 27	19	7.1-7.3
W	Mar. 1	20	7.4-8.1
F	Mar. 3	21	8.2-8.4
M	Mar. 6	22	8.5-8.6
W	Mar. 8	23	9.1-9.3
F	Mar. 10	24	9.4-9.5
M/W/F	Mar. 13 - 17	Spring Break	No Class
M	Mar. 20	25	9.6
W	Mar. 22	Exam 3	Lectures 19 – 25
F	Mar. 24	26	10.1-10.2
M	Mar. 27	27	10.3-10.4
W	Mar. 29	28	10.5-11.1
F	Mar. 31	29	11.2-11.3
M	Apr. 3	30	11.4-12.1
W	Apr. 5	31	12.2-12.3
F	Apr. 7	32	12.4
M	Apr. 10	Exam 4	Lectures 26 - 32
W	Apr. 12	33	13.1-13.3
F	Apr. 14	34	13.4-13.5
M	Apr. 17	35	13.6-13.8
W	Apr. 19	36	Drug Report Information
F	Apr. 21	37	14.1-14.2
M	Apr. 24	38	14.3
W	Apr. 26	Help and Review Session	
F	Apr. 28	Help and Review Session	
M	May 1	Final Exam 9:30 – 11:20 AM	13 questions – Lectures 33 - 38 12 questions - Lectures 1 - 32