Introductory Chemistry

Chemistry 1010 - 001
Dr. Harris
Fall 2011 Course Syllabus
8:30 – 9:20 a.m., MWF
Widtsoe 007
3 credits

Dr. Doug Harris
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Office Hours: 10:30 – 11:15 a.m. MW
SI Instructor: Amelia Hodges
E-mail: amelia.hodges@aggiemail.usu.edu
SI sessions: 6:30 – 7:20 p.m. T and 4:30 – 5:20 p.m. Thurs. Both sessions will be held in AGSC 202.

Exam Number | Date | Chapters Included
-------------|------|------------------
1            | Friday, 23rd of September | 1 – 3
2            | Monday, 17th of October | 4 – 6
3            | Monday, 7th of November | 7, 9, and 10
4            | Friday, 2nd of December | 11 – 13
Final        | Monday, 12th of December | Comprehensive

Materials
Scientific Calculator (no cell phone calculators)
Course web site: http://ion.chem.usu.edu/~harrisd/

Coursework
Examinations, 4 @ 100……………………………………. 400
Final Exam, comprehensive @ 100……………………….100
TOTAL (drop lowest exam score)………………………….400
Some Learning Objectives:

1. Gain a basic understanding of biomolecules.
2. Gain a basic understanding of organic compounds.
3. Explore acids and bases and the chemical reactions they undergo.
4. Describe the various types of intermolecular interactions.
5. Given a covalent molecular formula, predict the molecular structure.
6. Understand radioactivity, three major radioactive products, and half-life of a radioactive isotope.
7. Understand the fundamental concepts and language of chemistry including physical properties, chemical properties, and atomic structure.
8. Understand how elements are organized in the periodic table.
9. Explore two types (ionic and covalent) of chemical bonds.
10. Describe the various types of intermolecular interactions.
11. Gain an understanding of the basics of chemical reactions.
12. Explore acids and bases and the chemical reactions they undergo.
13. Gain a basic understanding of organic compounds.
14. Gain a basic understanding of biomolecules.

Grades

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<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100% - 92%</td>
<td>A</td>
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<tr>
<td>91% - 88%</td>
<td>A−</td>
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<tr>
<td>87% - 85%</td>
<td>B+</td>
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<tr>
<td>84% - 81%</td>
<td>B</td>
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<tr>
<td>80% - 77%</td>
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<tr>
<td>76% - 73%</td>
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<tr>
<td>72% - 64%</td>
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<td>63% - 60%</td>
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<tr>
<td>59% - 57%</td>
<td>D+</td>
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<tr>
<td>56% - 50%</td>
<td>D</td>
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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 2011 – 2012 General Catalog.
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. There will be four 50-minute exams and one 110-minute comprehensive final exam. Each exam (including the final) is worth 100 points. Each student may drop the lowest of their five exam grades. Students who only take four exams will have all four grades count. Students missing more than one exam will receive a grade of 0 on any missed in excess of 1. Exams will not be rescheduled to an earlier date and time. Make up exams will not be given. Students will be permitted to bring a calculator (no cell phone calculators) to the exam.
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 provide student grades upon request with photo ID before class begins.
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. Monday, November 7th when we meet to take the third exam. Further information will be given in class on Friday, October 14th 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.
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 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.