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<i>Office Hours:</i>	Monday and Wednesday, 2pm-4pm
<i>Class:</i>	Classroom Building room 310 (CR 310)
<i>section 01</i>	Mon, Wed, Fri 11:00 am - 11:50 am Mid-semester Exams on Wednesdays from 5:10-7:00 pm
<i>Textbook:</i>	Chemistry in Context, 8th Edition by American Chemical Society (McGraw-Hill Publishing)
<i>Lab Manual:</i>	Introductory Chemistry Laboratory Manual
<i>Other Required Materials:</i>	Safety Goggles Scientific Calculator Access to the Connect online homework system
<i>Course URL:</i>	http://w3.uwyo.edu/~sommer/Chem1000/Ch1000-main.html

Course Outline : This course represents a one semester introduction to chemistry. It deals with principles of chemistry and some applications to inorganic chemistry. It is intended for students in family and consumer sciences, nursing, education, general arts and sciences and most agriculture curricula, but not for those who will continue in the physical sciences, engineering, or those who are considering a medical career. Those students are advised to switch to Chem 1020 in order to fulfill their requirements.

Prerequisite: The course assumes no prior exposure to chemistry, although some students have found it useful if they had taken a chemistry course in highschool. However, the course does require students to have a working knowledge of algebra. Therefore, the prerequisite for the course is an ACT math score of 23 or higher (or the equivalent on the SAT or MPE). If you are not sure what any of this means, please see your instructor.

USP Requirement: This course fulfills the Physical Science (SP) component of the 2003 University Studies Program. SP courses include basic and applied study of interactions that govern all physical and chemical phenomena. They emphasize the laws of motion, the relationships of space, time, mass and energy, electromagnetic radiation, macroscopic and microscopic views of matter, chemical transformation, and quantum principles. They introduce the scientific approach, its scope and limitations. They provide a term-long laboratory experience (or equivalent substantial experimental work integrated with the lecture).

Lectures : The purpose of the lecture is to introduce the principles of chemistry. We recommend that students read the appropriate sections of the textbook prior to the lectures, so that the concepts will not be completely unfamiliar. Rereading the chapters after the lectures is also recommended. Participation during the lecture is recommended.

Homework: Throughout the semester, homework problems will be assigned to help you master the material and as a study aid for the exams. We will be using the **CONNECT** program from McGraw-Hill. Late homeworks will be assessed a 10% penalty per day late. No exceptions!

To get onto the homework system you will need to purchase access (it comes with the book). There is a link to this website on our course webpage. The course ID is:

CHEM 1000 - Intro Chem Fall 2015

Discussion Sessions : Each week, students will meet with a TA in small groups to discuss the course material and go over review problems from the textbook or from worksheets. During these hour-long meetings, students are encouraged to ask questions of their TA. Attendance at these discussions is mandatory for successful completion of the course.

Laboratory Sessions : The laboratory requirement of the course offers the students a chance to experience, first-hand, some of the concepts discussed in the lecture. In the weekly sessions, students will learn experimental techniques that are commonly used in chemical research. Associated with each lab is report that is turned in after completing the experiment. You will learn more about the lab policy at the mandatory safety training session and at the first lab.

Attendance in the laboratory is *mandatory*, and attendance in the lab requires that students undergo safety training (see lab syllabus for details). Accommodation for a **legitimate** absence (as described by either a University Excuse or doctor's note) must be made through the lab instructors and the lab coordinator, Carla Beckett (johnson@uwyo.edu). If three or more labs are missed, it is the policy of the department to award an **F** for the course, regardless of performance on exams. Similarly, if three or more lab reports are not turned in, an **F** will be awarded for the course. Otherwise, the lab portion of the course constitutes ~21% of the overall grade.

Students repeating this course may not be required to repeat the labs if they did well in the laboratory portion during the previous semester. If you are in this position, you will need to talk to someone in the Chemistry Office (PS 403) to fill out the necessary paperwork before the first lab meeting.

Grades : The grades for the course will be based on homeworks, hourly exams, lab reports and performance, and the final exam. The exam and homework schedule is given in the lecture schedule. The break-down of points is as follows:

Three Midterm Exams (111 each)	=	333 pts	(39.2%)
Several* Homeworks (variable points)	=	120 pts	(14.1%)
Laboratory Performance	=	175 pts	(20.6%)
Cumulative Final Exam	=	222 pts	(26.1%)
Course Total	=	850 pts	(100.0%)

(* Tentatively, there are 6 homeworks scheduled; the exact number will depend on the overall coverage in the course)

The exams will be graded on a curve such that the **median** grade is 70%. The letter grade cutoffs will

be roughly as follows:

92% – 100%	=	A range
89% – 91%	=	A- range
86% – 88%	=	B+ range
81% – 85%	=	B range
78% – 80%	=	B- range
74% – 77%	=	C+ range
69% – 73%	=	C range
66% – 68%	=	C- range
57% – 65%	=	D range
below 57%	=	F

The exact cutoffs for the grades will be determined at the end of the semester.

Makeup Policy : Students are required to take all the exams and attend all the laboratory sessions. If a student has a legitimate excuse for missing an exam or lab, he or she will be allowed to makeup the missed work. The makeup lab must be arranged through the lab instructor.

Students who legitimately miss an exam must make arrangements with the instructor to makeup the exam. ***The instructor reserves the right to refuse a makeup exam if the excuse is not acceptable.***

Late Exam and Arrival Policy : It is up to the students to arrive at exams in a timely manner. Except in very special cases, no extra time will be given to students who arrive late to an exam.

Academic Dishonesty : As a student at the University of Wyoming, you are expected to observe high standards of intellectual integrity and honesty. Plagiarism of the work of a fellow student or another author and cheating on exams constitutes cheating, and is a discredit to you and the University. Students caught cheating may be dismissed from the course with a grade of **F**. A second offense may result in dismissal from the University. For more information see: UW Regulation 6-802 “Procedures and Authorized University Actions in Cases of Student Academic Dishonesty.”

Students with Disabilities : Students requiring special arrangements for exams or labs should contact the Disability Support Services (SEO, Room 330 Knight Hall, <http://www.uwyo.edu/udss/>). Together, we will make the necessary accommodations. as soon as possible.

Working Together: Effective learning requires a constructive relationship between the teacher and the student. Guidelines detailing the responsibilities of both the teacher and student can be found at:

[http://uwadmnweb.uwyo.edu/a&s/Current/2005Stud&TeachersWorking%20Together\(7-29-05\).doc](http://uwadmnweb.uwyo.edu/a&s/Current/2005Stud&TeachersWorking%20Together(7-29-05).doc)

A link to this site is available on our course page.

Lecture Schedule : A tentative lecture schedule is included on the next page. Please note: this schedule is subject to change depending on the rate and depth of coverage.

DAY	DATE	TOPIC	CHAPT	HW	EXAM	LAB
Mon.	Aug. 31	Introduction, Policies, Etc.				
Wed.	Sept. 2	The Air We Breathe	1.1-1.6			
Fri.	Sept. 4	Classifying Matter	1.6-1.8			
Mon.	Sept. 7	Labor Day – No School.				
Wed.	Sept. 9	Chemical Reactions	1.9-1.13			SAFETY
Fri.	Sept. 11	Ozone, Atomic Structure and Bonds	2.1-2.3			
Mon.	Sept. 14	Rosh HaShana I – no lecture		HW1		
Wed.	Sept. 16	Light Waves and Matter	2.4-2.7			
Fri.	Sept. 18	Free Radicals	2.8-2.12			
Mon.	Sept. 21	The Greenhouse Effect	3.1-3.3			
Wed.	Sept. 23	Yom Kippur – no lecture				
Fri.	Sept. 25	Molecular Shapes and Vibrations	3.3-3.4			
Mon.	Sept. 28	Succoth II – no lecture				
Wed.	Sept. 30	Quantitative Concepts	3.5-3.8			
Fri.	Oct. 2	Climate Change	3.9-3.12			
Mon.	Oct. 5	Shemini Atzereth – no lecture		HW2		
Wed.	Oct. 7	EXAM REVIEW			Ex 1	
Fri.	Oct. 9	Energy from Combustion	4.1-4.4			
Mon.	Oct. 12	Energy of Chemical Bonds	4.5-4.7			
Wed.	Oct. 14	Synthetic Fuels	4.8-4.11			
Fri.	Oct. 16	Unique Properties of Water	5.1-5.4	HW3		
Mon.	Oct. 19	Aqueous Solutions	5.5-5.7			
Wed.	Oct. 21	Ionic and Non-ionic Solutes	5.7-5.9			
Fri.	Oct. 23	Water Treatment	5.10-5.12			
Mon.	Oct. 26	Acids, Bases, and Neutralization	6.1-6.4			
Wed.	Oct. 28	Sources of Acid Rain	6.5-6.8			
Fri.	Oct. 30	Effect of Acid Rain	6.9-6.13			
Mon.	Nov. 2	Nuclear Power	7.1-7.3	HW4		
Wed.	Nov. 4	EXAM REVIEW			Ex 2	
Fri.	Nov. 6	Radioactivity	7.4-7.6			
Mon.	Nov. 9	Half Lives	7.7-7.11			
Wed.	Nov. 11	Electron Transfer and Batteries	8.1-8.3			
Fri.	Nov. 13	Fuel Cells	8.4-8.6			
Mon.	Nov. 16	Photovoltaics	8.7-8.8			
Wed.	Nov. 18	Polymers 1	9.1-9.4			
Fri.	Nov. 20	Polymers 2	9.5-9.7			
Mon.	Nov. 23	Polymers 3	9.8-9.11	HW5		
Wed.	Nov. 25	Thanksgiving Break – No School				
Fri.	Nov. 27	Thanksgiving Break – No School				
Mon.	Nov. 30	Medicinal Chemistry	10.1-10.3			
Wed.	Dec. 2	EXAM REVIEW			Ex 3	
Fri.	Dec. 4	Drug Design	10.4-10.6			
Mon.	Dec. 7	Steroids and Herbs	10.7-10.10			
Wed.	Dec. 9	<i>Catch Up and/or Review</i>				
Fri.	Dec. 11	<i>Catch Up and/or Review</i>		HW 6		
Fri.	Dec. 18	Final Exam, 10:15 am – 12:15 pm				