CHEMISTRY 100

University at Buffalo | Fall Semester 2013 | Syllabus

STAFF

Lecturers	*Days*	*Time*	*Place*	*Phone*
Dr. Eduardo E. Alberto E-mail: eduardoa@buffalo.edu	M, W, F	11:00 am - 11:50 am	NSC 215	645-4230
Laboratory Director Mrs. Priscilla Clarke E-mail: pbc@buffalo.edu			NSC 266	645-4113

OFFICE HOURS

Dr. Alberto: Wednesdays 1:00 – 2:30 pm at NSC 623

MATERIALS NEEDED

Required:

1. **Textbook:** "Introductory Chemistry" by Russo and Silver, 4th Ed., Pearson Publishing, (custom package with Mastering Chemistry) from UB bookstore: www.ubuffaloshop.com
2. A valid University I.D. card will be required at examinations and for some laboratories.
3. A simple scientific, **non-graphing** calculator with only arithmetic and transcendental function (sine, cosine, log, *etc.*) capability is required for quizzes and examinations. Graphing calculators and those with alphanumeric memory capabilities, PDA's, *i*Pods, and cell phones, or any other electronic devices **are not** allowed at quizzes and examinations.

REGISTRATION

Registration Procedure:

If you are not completely registered for lecture and recitation, see Mrs. Clarke in NSC 266.

Important Dates:

- Tuesday, September 03: Last day to add a course.
- Tuesday, September 03: Last day to request S/U grading option.
- Friday, November 08: Last day to resign a course with a grade of R.

ABOUT THE COURSE

CHE 100 is a one semester introduction to basic chemistry for high school graduates who are reentering college after a long absence and/or for transfer students who are concerned about their readiness for science courses at UB. Also appropriate for students who have had no high school chemistry or who have a weak background in chemistry. Helps prepare students to complete General Chemistry (CHE 101 - CHE 102; CHE 105 - CHE 106 or CHE 107 - CHE 108), emphasizing problem solving. Topics include chemical measurements, properties of atoms and molecules, chemical reactions, chemical calculations, properties of gases, and thermochemistry.

Course Web Page (UBlearns):

The url for the CHE 100 course web page is: http://ublearns.buffalo.edu. Each student's username will be his or her UBIT name.

Lecture:

Students must be registered for lecture and attend all lectures. They should read the text in advance for a better understanding of the lecture and are responsible for learning the material presented whether they attend or not.

Recitation:

Students must be registered for recitation (a two hour time period) as well as for lecture. The recitation period involves discussion of lecture material and homework assignments. Three quizzes will be given in recitation during the semester (see schedule). Group works will also be assigned, collected, and reviewed by the teaching assistants (TAs) in recitation.

Homework:

Homework will be due online through Mastering Chemistry at 11:59 pm on each Friday they are assigned. Go to the website: http://www.masteringchemistry.com and click the "Students" button under the "Register" text. Indicate whether you have an **access code** and select "continue." Then enter the requested information, including your access code, to register to Mastering Chemistry. Please be sure to accurately enter your **UB person number** so that you receive credit for your assignments. This is the eight digit number that appears on your student ID card. Once you are logged in, enter the University at Buffalo General Chemistry CHE 100 course with the class ID: **UBCHE100F2013**.

Returning Students: Go to http://www.masteringchemistry.com and log in. Choose "join course" from the welcome page. Enter the class ID: **UBCHE100F2013**. Procedures for registering will also be reviewed in lecture and instructions are posted on the UBlearns website. On the home page you can find information for the 24 hour online chat support and phone support available to help you with issues using this system at any time during the semester. Further questions about the homework can be directed to Dr. Alberto; issues with accessing Mastering Chemistry can be addressed to Dr. Valerie Frerichs (zuccari@buffalo.edu).

Integrated Example Problems:

Example problems covered in lecture, recitation, and on the homework will be integrated into exams and quizzes throughout the semester. The details of the questions (quantities, compounds, etc.) will vary to eliminate memorization of the numerical answers, but the problem solving process will be unchanged. Each exam will feature AT LEAST one problem from homework as well as an example from the lecture. At least one question on each quiz will be taken from group works assigned by the respective TA for each recitation section.

Grading:

Recitation	
Mastering Chemistry Homeworks (best 8 of 10 @ 10 pts each)	80
Group works (10 @ 5 pts each)	50
Quizzes (3 @ 40 pts each)	120
Recitation Total	250
Lecture	
Exams (2 @ 100)	200
Final Exam	200
Lecture Total	400
GRAND TOTAL	**650**

The final course grade (A-F including +/–'s) is determined strictly on the basis of the total number of points accumulated; individual exams, quizzes, *etc*., are not assigned letter grades. Students should keep all examinations, quizzes, and group works until they have received their course grade. These are the only materials which will be accepted as evidence of clerical error in the determination of the course grade.

Examinations:

Examinations have been scheduled for **October 2nd** and **November 8th** during class time, as well as a final exam on **December 9th**. Please clear your calendar for these exams! Students should bring their University ID card to all examinations for identification purposes.

Make-up Policy:

Students who are unavoidably absent from an exam or recitation must submit an excuse request form, obtainable from the Copy Center window (NSC 361), and should be prepared to document the absence if requested to do so. Quizzes missed because of a valid absence will be prorated on the basis of other work that is done. Make-up exams will be given during the following week.

Incompletes:

A grade of incomplete ("I") indicates that additional course work is required to fulfill the requirements of a given course. Students may only be given an "I" grade if they have a *passing average in coursework that has been completed* and have well-defined parameters to complete the course requirements that could result in a grade better than the default grade. Prior to the end of the semester, **students must initiate the request for an "I" grade and receive the instructor's approval. Students who present a valid written excuse for failure to take the Final Examination either prior to or within 48 hours of that exam will be given a grade of "I" (incomplete) if they had a passing average after Exam 2. Assignment of an "I" grade is at the discretion of the instructor.** Students with failing averages after Exam 2 are not eligible for incompletes by University policy, and will automatically be assigned a grade of F if they do not take the Final Examination. "I" grades must be completed within twelve months; students must not re-register for courses for which they have received an 'I" grade.

The instructor must specify a default letter grade at the time the "I" grade is submitted. A default grade is the letter grade the student will receive if no additional coursework is completed and/or a grade change form is not filed by the instructor. Individual instructors may set shorter time limits for removing an incomplete than the twelve-month time limit. For Fall 2013, the incomplete grade default date is **June 30, 2014**. Upon assigning an "I" grade, the instructor shall provide the student specification, in writing or by electronic mail, of the requirements to be fulfilled, and shall file a copy with the appropriate departmental office. The Incomplete policy is not retroactive and does not apply to transfer credit. The "I" must be changed to a grade before the degree conferral date if the student plans to graduate in that semester. A default grade can be "B," "C," "D," or "F." (If a student selected an S/U grading option, it will replace the default letter grade when the grade defaults.)

Students needing Assistance:

The Chemistry Department works closely with the Office of Accessibility Resources to make it possible for anyone wishing to take a chemistry course to do so. Arrangements can be made for students who cannot take examinations or quizzes in the scheduled environment. Any arrangements must be made well in advance of the event by contacting Mr. Randall E. Borst, Director of Accessibility Resources, 25 Capen Hall and Dr. Alberto.

Academic Integrity:

The University community depends upon shared academic standards. **Academic dishonesty in any form represents a fundamental impairment of these standards.** If, after consultation with the student, an instructor believes the student has committed an act of academic dishonesty, the instructor has the authority to impose sanctions in keeping with this principle. The MINIMUM sanctions to be imposed in Chemistry 100 are as follows:

- First infraction: The maximum point value for the assignment will be subtracted from the student's point total.
- Subsequent infraction(s) will result in a minimum penalty of 100 points.

Students should consult the Academic Regulations and Procedures section of the Undergraduate Education Bulletin for a more detailed discussion of possible harsher sanctions and the appeals process.

Academic dishonesty includes, but is not limited to, the following:

1. The possession of crib sheets or unauthorized notes at an examination or quiz, whether or not they are used. This includes **ANY** use of cellular telephones or other electronic devices (e.g. PDA's, *i*Pods), whose possession during examinations and quizzes is **STRICTLY PROHIBITED**. (Calculator memory banks, calculator cases or other articles are subject to inspection by the proctors.)

2. Copying from another person's examination, quiz, or group work or deliberately allowing another person to copy from you.

3. Changing any of the answers on an examination paper, quiz, or lab report and then requesting that the paper be regraded for additional credit. **To discourage tampering of quiz or exam answers, we will randomly photocopy exams and quizzes. Any quiz or exam returned**

for regrade in which responses have been altered in any way will be considered deliberate cheating, and the student will be subject to penalties as described above.

4. Stealing or tampering with other students' quizzes or exams. This will cause us to take action to have the offending student removed from the university.

Miscellaneous:

NSC 361 (the Copy Center) will serve as a general office during certain (posted) hours for the following purposes:

1. Requests for excused absence forms may be obtained there and on UBlearns. These requests must be signed by the appropriate instructor (lecturer for exams, recitation instructor for quizzes and group works) and returned to NSC 361 by the student within seven days of the absence.

2. Quizzes and exams which students wish to have regraded must be turned in to NSC 361 within one week after the paper has been received by the student. The nature of the problem must be specified on an attached sheet. Papers containing "white-out" corrections will not be regraded.

3. Students will be given a dated and initialed receipt for all materials turned in at the Copy Center.

Course Objectives Assessment:*

Students successfully completing this course will	**Assessment**
Understand and apply concepts to solve problems using: • Matter and Measurement; • Atoms, Molecules and Ions	Homeworks 1-3 Group works 1-3 Quiz 1 Exam 1 1/6 of credit on the final exam Students must achieve a grade equal to C or above to be deemed "satisfactory" on a mid-semester report
Use the following to predict, depict and describe: • Electronic structure of atoms • Elemental periodic properties • Basic properties of chemical bonding • Molecular geometry and theory of bonding	Homeworks 4-7 Group works 4-7 Quiz 2 Exam 2 1/6 of credit on the final exam
Describe and calculate quantities for: • Gas behavior • Stoichiometry and calculations with chemical formulas and equations • Reactions in aqueous solution	Homeworks 8-10 Group works 8-10 Quiz 3 2/3 of credit on final exam

** Course objectives can be subjected to changes due to unforeseen circumstances*

CHE 100 Fall 2013 Lecture & Examination Schedule*

Week of	Monday	Wednesday	Friday
08/26 - 08/30	Intro / Chaper 1	Chapter 1	Chapter 2
09/02 - 09/06	Labor Day	Chapter 2	Chapter 2
09/09 - 09/13	Chapter 2	Chapter 2	Chapter 3
09/16 - 09/20	Chapter 3	Chapter 3	Chapter 4
09/23 - 09/27	Chapter 4	Chapter 4	Chapter 4
09/30 - 10/04	Chapter 4	**Exam 1**	Chapter 5
10/07 - 10/11	Chapter 5	Chapter 5	Chapter 5
10/14 - 10/18	Chapter 6	Chapter 6	Chapter 6
10/21 - 10/25	Chapter 7	Chapter 7	Chapter 7
10/28 - 11/01	Chapter 8	Chapter 8	Chapter 8
11/04 - 11/08	Chapter 8	Chapter 8	**Exam 2**
11/11 - 11/15	Chapter 9	Chapter 9	Chapter 9
11/18 - 11/22	Chapter 9	Chapter 9	Chapter 9
11/25 - 11/29	Chapter 11	Fall Recess	Fall Recess
12/02 - 12/06	Chapter 11	Chapter 11	Chapter 11
	Final Exam 11:45 am – 2:45 pm		

**Schedule can be subjected to changes due to unforeseen circumstances*

Important Dates

09/03/2013 Last day to add/drop a course
09/03/2013 Last day to request S/U grade option
10/02/2013 Exam 1 (chapters 1-3)
11/08/2013 Exam 2 (chapters 4-7)
11/08/2013 Last day to resign a course with a grade of R
12/09/2013 Final Exam (33% Chapters 1-7, 66% Chapters 8, 9, 11)

CHE 100 Fall 2013 Recitation & Assignment Schedule*

Week of	Monday	Tuesday	Wednesday	Thursday	Friday
08/26 - 08/30	No Recitation	No Recitation	No Recitation	No Recitation	
09/02 - 09/06	Labor Day	No Recitation	No Recitation	Rosh Hashanah	
09/09 - 09/13	GW 1	GW 1	GW 1	GW 1	HW 1
09/16 - 09/20	GW 2	GW 2	GW 2	GW 2	HW 2
09/23 - 09/27	GW 3 **Quiz 1**	GW 3 **Quiz 1**	GW 3 **Quiz 1**	GW 3 **Quiz 1**	HW 3
09/30 - 10/04	GW 4	GW 4	GW 4	GW 4	
10/07 - 10/11	GW 5	GW 5	GW 5	GW 5	HW 4
10/14 - 10/18	GW 6	GW 6	GW 6	GW 6	HW 5
10/21 - 10/25	GW 7	GW 7	GW 7	GW 7	HW 6
10/28 - 11/01	**Quiz 2**	**Quiz 2**	**Quiz 2**	**Quiz 2**	HW 7
11/04 - 11/08	GW 8	GW 8	GW 8	GW 8	
11/11 - 11/15	GW 9	GW 9	GW 9	GW 9	HW 8
11/18 - 11/22	GW 10	GW 10	GW 10	GW 10	HW 9
11/25 - 11/29	No Recitation	No Recitation	*Fall Recess*	*Fall Recess*	*Fall Recess*
12/02 - 12/06	**Quiz 3**	**Quiz 3**	**Quiz 3**	**Quiz 3**	HW 10

**Schedule can be subjected to changes due to unforeseen circumstances*

GW = Group work
HW = Homework, through Mastering Chemistry

Important Dates:

09/23 – 09/27 Quiz 1 (Chapters 1-3)
10/28 – 11/01 Quiz 2 (Chapters 4-7)
12/02 – 12/06 Quiz 3 (Chapters 8 & 9)

CHE 100 Fall 2013 Contents Schedule*

Week of	Monday	Wednesday	Friday
08/26 - 08/30	What is Chemistry	What is Chemistry	The Numerical Side of Chemistry
09/02 - 09/06	Labor Day	The Numerical Side of Chemistry	
09/09 - 09/13	The Numerical Side of Chemistry	The Evolution of Atomic Theory	
09/16 - 09/20	The Evolution of Atomic Theory		
09/23 - 09/27	The Modern Model of the Atom		
09/30 - 10/04	The Modern Model of the Atom	**Exam 1**	Chemical Bonding and Nomenclature
10/07 - 10/11	Chemical Bonding and Nomenclature		
10/14 - 10/18	The Shape of Molecules		
10/21 - 10/25	Intermolecular Forces and the Phases of Matter		
10/28 - 11/01	Chemical Reactions		
11/04 - 11/08	Chemical Reactions		**Exam 2**
11/11 - 11/15	Stoichiometry and the Mole		
11/18 - 11/22	Stoichiometry and the Mole		
11/25 - 11/29	Ideal Gas	Fall Recess	Fall Recess
12/02 - 12/06	Ideal Gas		
	Final Exam 11:45 am – 2:45 pm		

**Schedule can be subjected to changes due to unforeseen circumstances*