

CHEMISTRY 100

University at Buffalo

Fall Semester 2007

Course Description

STAFF

Lecturer:

	<i>Days</i>	<i>Time</i>	<i>Place</i>
James McIver NSC325 645-6800X2035 mciver@buffalo.edu	M, W, F	9:00- 9:50 AM	215 NSC
	Tu, Th	11:00 AM- 12:20 PM	220 NSC

Office Hours:

M	10-11 AM	325 NSC
T	1-2 PM	325 NSC

Or by appointment with Connie chemug@buffalo.edu (716)645-6800X2035
Tell her you are a CHE100 student.

Laboratory Directors:

Mrs. Priscilla Clarke NSC266 645-6800X2062 pbc@acsu.buffalo.edu
Dr. Valerie Frerichs NSC 334 645-6800X2497 zuccari@buffalo.edu

Teaching Assistants:

Olga Aminova, oaminova@buffalo.edu
Aimee Clements, ajc43@buffalo.edu
Victoria Farwell, farwell@buffalo.edu
Nadine Kraut, nkraut@buffalo.edu
Diane Youker, dgyouker@buffalo.edu

MATERIALS NEEDED

1. **Text:** "Introductory Chemistry" by Nivaldo Tro, Prentice Hall, Custom Edition for SUNY Buffalo, 2006; access to companion web site: <http://www.prenhall.com/tro>.
2. A valid University I.D. card will be required at examinations.
3. A simple scientific 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 WILL NOT BE ALLOWED at quizzes and examinations.
4. Access to UBlearns CHE100 web site (available through MYUB): <http://ublearns.buffalo.edu>. See Mrs. Clarke or Mrs. Frerichs or your recitation instructor about any problems with accessing this site.

REGISTRATION

If you are not completely registered for lecture and recitation, see Mrs. Clarke in NSC 266 or Dr. Frerichs in NSC 344.

IMPORTANT DATES:

Friday, August 31: Last day to drop course with no financial penalty
Monday, September 3: Labor Day, no Classes
Friday, September 7: Last day to add course. Last day to drop course with no R
Thursday, September 13: No Classes
Friday, October 5: Exam I. 5-6:50 pm location TBA
Friday, November 9: Last day to resign a course with a grade of R.
Friday, November 16: Exam II. 5-6:50 pm location TBA
W-Th-F November 21, 22, 23: Thanksgiving, No Classes
: Final Exam, , location TBA

ABOUT THE COURSE*Course Goals:*

CHE100 prepares students with a weak or no background in chemistry to succeed in the General Chemistry courses (CHE101-102, CHE107-108, or CHE105-106). It introduces the student to the fundamental principles and the vocabulary of chemistry using both traditional and everyday examples. A central focus is on developing the skills needed to solve the many types of problems that occur in general chemistry.

Lecture:

Students must be registered for lecture and should attend all lectures. The lecturer assumes that all students have read the suggested textbook material and worked on the suggested homework prior to attending lecture. The weekly reading and homework assignments are found at the end of this document. The lectures will review and build on some of this material. Much of the lecture material will not be found in the textbook, but is presented to amplify or expand on concepts in the book. Abbreviated lecture notes (powerpoint), answers to lecture quizzes and exams will be available on the UBLearns web site at appropriate times. Students will be responsible for all assigned reading and homework as well as lecture material, whether or not the student attends lecture. This is not high school. The burden of learning is upon the student, not the teacher. To help motivate the student, unannounced quizzes will occasionally be given during lectures. There will be no lectures on September 3, September 13, or November 21-23.

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, textbook readings and homework assignments. Quizzes will be given in recitation throughout the semester. These will cover recent lecture and textbook material and problem assignments. Students will hand in their homework at the beginning of recitation during the week following the assignment. It is suggested that they make a photocopy of their homework to refer to while homework is being discussed. Each week randomly selected homework problems will be graded, so students are encouraged to work all the problems. Solving problems is not just the best way to succeed in general chemistry, it is the only way. Students should be aware that recitation is the most important part of the course in terms of learning the material. There will be no recitations during the week of August 28 and the week of November 20. Students with Monday recitations should attend another recitation during the week of September 4, students with Thursday Recitations should attend another one during the week of September 10. A schedule of recitations can be found on the UBLearns web site.

<i>Grading:</i>	<u>Points</u>
<u>Lecture</u>	
Quizzes	50
<u>Recitation</u>	
Quizzes	50
Homework	50
Group Work	<u>50</u>
Recitation Total	150
<u>Examinations</u>	
Hour Exams (2 @ 100)	200
Final Exam	<u>200</u>
Examination Total	400
<u>GRAND TOTAL</u>	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 problem sets 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. Students who transfer into CHE 100 from CHE 101 (or CHE 105, CHE 107) will be graded solely on their work in CHE100. They will not be penalized for exams or quizzes missed while they were enrolled in CHE101. They

will, however, be responsible for all the material covered in exams and quizzes taken in CHE100, as reflected, for example, in the final exam.

Examinations:

Hour examinations have been scheduled for Friday, October 5; and Friday, November 16 evenings from 5-6:50 pm. The rooms are tba,. Clear your calendar!

You will not be allowed to enroll in this course if you have irresolvable conflicts with these exam times. Student athletes, disabled students and others with legitimate reasons for missing exams must see the instructor well in advance of the exam. Documentation is required. Students must bring their University ID card to all examinations for identification purposes. Students are allowed to bring one side of one 8.5 by 11 inch sheet of handwritten notes into each of the exams. These notes will be collected along with the exams. Two sides of a page of handwritten notes are allowed for the final exam. Copies of the previous year's examinations (with answers) will be made available on UBLearn.

Make-up Policy:

There will be no makeup exams or quizzes. Students who are unavoidably absent from an exam or quiz must present an excuse (obtain form from the UBLearn web site) to their recitation instructor and should be prepared to document the absence (notes from doctors, coaches, etc.) if requested to do so. Quizzes and exams missed because of a valid absence will be prorated on the basis of other work that has been done. **Attendances at weddings, oversleeping or leaving early for vacation are not valid excuses.**

Incompletes:

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. Students with failing averages after Exam 2 are not eligible for incompletes and will be assigned a grade of F if they do not take the Final Examination. The default grade for an incomplete will be computed with the final examination counting 0 points. Incompletes must be removed by examination within 12 months, either by taking a make-up exam to be given early in the Spring 2008 semester or by taking a make-up exam at the regularly scheduled CHE100 Final Exam time in December 2008.

Students requesting an incomplete are hereby reminded that University regulations prohibit a second registration in a course for which they currently have an I-grade and that all I-grades must be removed before graduation. Students who stop attending, as judged by their absence from Exam 2 and the Final Examination, without officially resigning, will be assigned the grade of F

and their lack of attendance will be reported to the Office of Financial Aid at the end of the semester.

Handicapped Students:

The Chemistry Department works closely with the Office of Disability Services to make it possible for anyone wishing to take a Chemistry course to do so. Special arrangements can be made for handicapped students who cannot take examinations or quizzes in the normal manner. All such arrangements must be made well in advance of the event by contacting Mr. Randall E. Borst, Director of Disability Services, 25 Capen Hall, Dr. McIver for lecture quizzes and examinations, and Mrs. Clarke for recitation quizzes.

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. A subsequent infraction 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 unauthorized notes at an examination or quiz, whether or not they are used. (Calculator memory banks, calculator cases or other articles are subject to inspection by the proctors.)
2. Copying from another person's examination paper or quiz or deliberately allowing another person to copy from you.
3. Changing any of the answers on an examination paper or quiz and then requesting that the paper be regraded for additional credit.

Miscellaneous:

1. There will be no handouts in this course, except quizzes and exams. All relevant material will be posted to the UBlerns web site. Students must have access to this site and should check it frequently for new announcements and material. Request forms for excused absences as well as pedagogical material may be obtained there. These requests must be signed by the appropriate instructor (lecturer for exams and lecture quizzes, recitation instructor for recitation quizzes) and returned to student's recitation instructor within seven days of the absence. A directory of all Chemistry 100 instructors and Teaching Assistants (with office hours listed) will also be available on the course web site.
2. Quiz and Exam papers which students wish to have regraded must be turned in to the student's recitation instructor 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 should locate NSC110 which is staffed from 9 am to 9 pm Monday through Thursday and from 9 am to 3 pm on Friday. The staff consists of teaching assistants and lecturers for the freshman chemistry courses. They will be able to help with homework, etc. This room also contains a number of computer terminals reserved exclusively for freshman chemistry students (including CHE100). These can be used for various CAI drills and access to the internet.
4. The url for the CHE 100 course web page can be found at:
<http://ublearns.buffalo.edu> Each student’s username will be his or her UBIT name.

CHE100 Tentative Syllabus

Week of	Text	Homework Assignment	Topics	Comments
Aug. 27	Chap 1	Chapter 1: 16, 18, 20	Introduction to CHE100, The Nature of Science	No recitations
Sept. 3	Chap 2	Chap 2: 32,38,46,60, 68, 78, 86, 94, 100	Numbers and Units	No lecture, no recitation Monday
Sept. 10	Chap 3	Chap 3: 32, 36,46,50, 56,60, 62, 76, 86, 90	Types of matter, Energy, temp. scales	No Classes Thursday
Sept 17	Chaps 4, 5	Chap 4: 48, 74, 80, 98, 104 Ch 5: 26, 34, 48, 78, 84	Atoms and Molecules	
Sept 24	Chap 6	Ch 6:22,38,44,54,62, 70, 80, 90, 98, 100	Compositions of chemicals	
Oct 1	Chap 7	Ch 7:36, 54,62,64,72, 82, 84, 90, 98, 102	Chemical reactions	Exam I, Friday
Oct 8	Chap 8	Ch 8:16, 22,26,36,38, 42, 48, 62, 70, 74	Stoichiometry, Limiting reagents	
Oct 15	Chap 9	Ch 9:30, 40,46,50,54, 58, 66, 80, 92, 98	Atomic structure Periodic Table	
Oct 22	Chap 10	Ch10:28,38,48,50,62, 64, 76, 86, 88, 96	Bonds, Molecular electronic structure	
Oct 29	Chap 11	Ch11:32,38,50,60,70,78, 88, 94, 106, 110	Gas Laws	
Nov 5	Chap 12	Ch12:46, 48, 52, 62, 68, 70, 72, 84, 88, 92	Intermolecular forces Solids and liquids	
Nov 12	Chap 13	Ch13:26, 34, 38, 52, 62, 70, 74, 88, 94, 106	Solutions	Exam II, Friday
Nov 19	Chap 14	Ch14:42, 48, 52, 60, 64, 76, 80, 82, 88, 100	Acids and Bases	No recitations this week. No lec W,Th,F
Nov 26	Chap 14-15	Chap 14 homework Due week of Dec 3	Acids and Bases Equilibrium	
Dec 3	Chap 15	Ch15:42, 48, 54, 56, 62, 64, 68, 80, 88, 96	Equilibrium	Chap 15 Homework will not be collected.
Dec 11			Final Exam period	No lectures No recitations
Dec 17			Final Exam period	No lectures No recitations