

**Northern Illinois University****Course: CHEM 110****Credit: 3****Instructor:** Dr. Catherine E. Check**E-mail:** C.Check@RockValleyCollege.Edu**Office:** La Tourette Hall FW 308**Voice-mail:** 815-921-3405**Office Hours:** Immediately after lecture. Monday, Tuesday, Wednesday 9:15 to 10:00 AM**Class Schedule:** Lecture FW 201 MTuWTh 8:00 to 9:15 AM

**Required Text:** ISBN: 9780077961213 Denniston, Topping and Caret, General, Organic and Biochemistry, McGraw-Hill, seventh edition, 2011. We use a special NIU version that comes in paperback and contains only Chapters 1-9. A Student Study Guide is available, (but not required), and many students find it useful.

**Required Calculator:** A non-graphing scientific calculator. You will need a simple scientific calculator that you are able to use properly. Bring it to lecture and to exams. Any calculator used must be for scientific use, including the functions: log and scientific notation. Graphing calculators will **not** be allowed during exams or quizzes due to cheating with "notes" and equations that can be stored. Also, a cell phone is not allowed as a calculator due to texting/ cheating. Use of Graphing Calculator, ipod, tablets, or cell phone during an exam or quiz warrants an automatic zero score and will not be replaced by any other score.

### **General Education Course Objectives**

- Improve ability to think critically and logically;
- Improve ability to reason quantitatively and to perform basic chemical computations;
- Learn how to use the scientific method and theories to understand chemical phenomena;
- Develop an appreciation for the importance of the role of chemistry in everyday life; and
- Develop an understanding of the historical development of the field of chemistry.

### **Content Objectives of This Course**

- Understand the concepts of matter and energy and become acquainted with metric and SI units of measurement;
- Understand the electronic arrangement in atoms and the periodic properties of elements;
- Learn how to write chemical formulas, name compounds, and to perform simple chemical calculations;
- Familiarity with the behavior of gases, liquids, and solids;
- Become knowledgeable about the properties of aqueous solutions;

### **Common Sense Conduct:**

1. No cell phones, pagers, or other electronic intrusions allowed. Please store all of these devices. All cell phones may be put in silent/vibrate mode and left on for emergency alerts only. Please refrain from talking, texting, etc. during class. Be quiet and respectful of the other students desire to learn. If repeated disturbances of my lecture occur, you will be required to leave class, and will not be able to make up any in-class work. 2. Do not bring children to class and do not leave them out in the hallway. Make backup plans now for childcare. 3. Buy the textbook. 4. Share your name and e-mail address with at least two other students in class. This way when you miss class, you can arrange to get notes from someone present.

**Class Format:** The course will be composed of lectures, exams, and occasional homework or pop quizzes. It is imperative that you attend class. As in any science course, the in-class lectures need to

be supplemented by your reading of the text, working of problems, and studying for quizzes and exams. If you miss class, it is your responsibility to acquire the lecture notes and any assigned class work from a fellow classmate. I will not give repeat lectures or review for exams. There are no makeups for quizzes/HW, or exams. No late work will be accepted. Once a deadline passes, it has passed. No items will be scored that are submitted to the office or mailbox. The work must be turned in during normal lecture time to prevent loss. Exams will be given on the day stated in the syllabus and will not be shifted. They are set at 70 min. A final exam will be given and is required.

If an absence occurs on an exam day or if your Final Exam score is higher than your lowest exam score, the score for the Final Exam will replace that exam percentage (Instead of 20 % the final exam will be worth 40 % of your overall grade). Missing the final exam will result in a 0% for the exam score. If a medical emergency occurs at the very end of the semester, an incomplete "I" may be assigned for your grade if I am contacted before grades are due.

**Grade Scale:** The Department of Chemistry and Biochemistry has instituted a capped grade point average requirement for Chem 110. The average GPA in Chem 110 is required to be  $1.85 \pm 0.15$ , or in the range 1.70-2.00. The typical class GPA is therefore a high "D" or low "C". Your overall grade will depend on your performance vs. that of every other student in the class. The grading scale embodies the statistical curve, with most students earning "C"s.

The final grade for the course will be determined from the following possible point totals:

There will be three examinations during the semester (100 points each). 300 pts (60%)

There will be some assignments and pop quizzes (100 points total). 100 pts (20%)

There will be a comprehensive final examination (100 points). 100 pts (20%)

The exams will consist of 25 multiple-choice questions, and will be scored by Scantron. Requests for scoring checks must be made within 2 days from returned scores.

### Academic Honesty Statement:

The faculty and administration expect that NIU students are enrolled in courses as serious and honorable scholars. Furthermore, students are expected to do their own, original work, except when collaboration on projects is directed by faculty as part of the course or specific assignment. Students are expected to observe the commonly accepted standards of academic honesty at all times. Scholastic dishonesty will not be tolerated. This includes **plagiarism** (appropriation of another's work and incorporation into one's own homework, quiz, or exam, offered for credit) and **collusion** (**unauthorized** collaboration with another person in preparing course work offered for credit). In simple terms, this includes looking at another student's exam during a testing session, allowing another student to copy your work, and use of unauthorized materials such as lecture notes, crib sheets, textbooks, prohibited electronic devices during exams or quizzes. For a second offense a grade of "F" will be assigned for the course. Do not copy work or answers from each other, and do not expect tutors to provide answers to work.

### NOTIFICATION OF SERVICES FOR STUDENTS WITH DISABILITIES

NIU abides by Section 504 of the Rehabilitation Act of 1973, which mandates that reasonable accommodations be provided for qualified students with disabilities. Before contacting me, you must register with the Center for Access-Ability Resources (CAAR), the designated office on campus to

provide services and administer exams with accommodations for students with disabilities. The CAAR office is located on the 4th floor of the University Health Services building (815-753-1303). *You must then notify the instructor of any accommodation recommended/agreed upon by CAAR office. This includes the need for additional time for exams. This is not feasible for pop quizzes.* If you have a disability that requires accommodations, please contact me early in the semester so that I can help provide them. Accommodations are not retroactive.

### DISCLAIMER

What follows is a **tentative schedule**. It is a set **READING** assignment. You should always be ahead of class lecture in your own reading so that you may ask appropriate questions to improve your understanding of the topics being discussed. Exam dates will not change, however, the quantity of material you are responsible for knowing at that time may be altered based on changes to anticipated class lectures. Any changes will be announced in class. Any handouts will be distributed during class only.

### Schedule of Course Activities: CHM 110 Summer 2012 Semester

Always submit any assigned materials at the beginning of the lecture to the folder on the front desk unless otherwise stated by the instructor.

Week of	Lecture
1. Jun 18	<b>MTuW</b> Intro., Ch 1 Chemistry: Methods and Measurements <b>Th</b> Ch 2 Structure of the Atom and the Periodic Table
2. Jun 25	<b>MTu</b> Ch 2 continued <b>W</b> Ch 3 Structure and Properties of Ionic and Covalent Compounds <b>Th Exam 1 Ch 1-2 emphasizing Ch 1 and 2</b>
3. Jul 2	<b>MTu</b> Ch 3 continued <b>W</b> No Class on July 4 <b>Th</b> Ch 4 Calculations and the Chemical Equation
4. Jul 9	<b>MTu</b> Ch 4 continued <b>W</b> Ch 5 States of Matter: Gases, Liquids, and Solids <b>Th Exam 2 Ch 1-4 emphasizing Ch 3 and 4</b>
5. Jul 16	<b>MTu</b> Ch 5 continued <b>WTh</b> Ch 6 Solutions
6. Jul 23	<b>M</b> Ch 6 continued <b>TuW</b> Ch 7 Energy, Rate, and Equilibrium <b>Th Exam 3 Ch 1-6 emphasizing Ch 5 and 6</b>
7. Jul 30	<b>M</b> Ch 7 continued <b>TuWTh</b> Ch 8 Acids and Bases and Oxidation-Reduction
8. Aug 6	<b>MTuW</b> Ch 9 The Nucleus, Radioactivity, and Nuclear Medicine <b>Th FINAL EXAM</b>
Final Exam:	<b>Comprehensive and Cumulative Ch 1-9. Final exam is required and counts towards final course grade. In addition, if you perform better on the final exam, the percentage will replace the lowest of the regular in-class exam percentage.</b>

After reviewing the information contained in the syllabus handout and your notes from the class introduction, please read and fill out the following:

- 1) I have read the full syllabus and reviewed notes from the lecture class introduction for CHEM 110 for the Summer 2012 semester at NIU taught by Dr. Catherine Check.
- 2) When given the opportunity during class, I asked for clarification if I did not understand something stated in the syllabus.
- 3) I understand the information that is provided, and what is expected of me as a student in lecture.

Sign and date this sheet in the space provided below and return in class to Dr. Catherine Check by Wednesday, June 20, 2012.

NAME (Printed): \_\_\_\_\_

Legible SIGNATURE: \_\_\_\_\_

Date Signed: \_\_\_\_\_