

Chemistry 101

Dr. Susan Geldart

Office: Pastore 215A
124)

Email: sgeldart@chm.uri.edu

Course Details

Section 1: TuTh9:30am-10:45 (Rm

Text: Raymond Chang, General Chemistry: The Essential Concepts 6th edition: chapters 1-13 (skip ch. 11)

Chapter 1: Chemistry: Introduction

Chapter 2: Atoms, Molecules, and Ions

Chapter 3: Stoichiometry: Chemical Calculations

Chapter 4: Reactions in Aqueous Solutions

Chapter 5: Gases

Chapter 6: Energy Relationships in Chemical Reactions

Chapter 7: The Electronic Structure of Atoms

Chapter 8: The Periodic Table

Chapter 9: Chemical Bonding I: The Covalent Bond

Chapter 10: Chemical Bonding II: Geometry and Hybridization of Atomic Orbitals

Chapter 12: Intermolecular Forces and Liquids and Solids

Chapter 13: Physical Properties of Solutions

Course objectives:

The goal in this course is to lay the foundation for future chemistry, biochemistry pharmaceutical and material science courses. The terminology, fundamental principles and theories presented in Chemistry 101 will be heavily used in these other courses. In addition to factual material, the ability to apply these concepts to real-world problems is essential to passing the course and many subsequent courses.

Studying:

I strongly suggest doing as many problems at the end of each chapter as possible until you are comfortable with the material. The course is based on being able to solve word problems, so you will not pass if you just read the text and follow the problems given either in the text or the lecture. **YOU MUST BE ABLE TO DO THE PROBLEMS AT THE END OF EACH CHAPTER COMPLETELY ON YOUR OWN.** If you need more practice, or are having trouble with the problems, email me immediately before you get too far behind. I can often figure out why you are having problems and suggest ideas that may help you get through the course.

This course moves extremely quickly. We will cover approximately 1 chapter per week, so it is important that you keep up with the workload. I can't go any slower, or we will not be able to get through all the required material. The material learned in each chapter will be used in subsequent chapters, so if you fall behind, it's nearly impossible to catch up again. The final is truly cumulative; a single question may require you to use techniques and concepts learned in several different chapters.

Notes and Study Aids:

A textbook and a copy of the solutions manual are available through the library reserves for 2 hour use. You will need your ID to have them released to you. Ask for these items at the front desk. You cannot take the materials out of the library, but must use them in the library for up to 2 hours. Class notes, study aids and copies of old exams are available through the department website at www.chm.uri.edu. Look under "for current students" and then go to "Course Descriptions and Web Pages" to find the link to this course. Your grades and any course announcements will be done through Sakai.

Office Hours:

My scheduled office hours are Tuesday and Thursday from 12:30-1:30pm and Wednesday and Friday from 9-10am. If these times are not convenient, please email me to set up an appointment outside these hours.

The Academic Enhancement Center (AEC)

This is a challenging course. Success requires that you keep pace with the work, understand course concepts, and study effectively. The Academic Enhancement Center (www.uri.edu/aec) is a great place to do this. At the AEC you can work alone or in groups, and tutors and professional learning specialists are available to help you to learn, manage your time and work, and study well. They're open Monday through Thursday from 10 a.m. to 9 p.m. and Fridays until 1 p.m. All services are free and no appointment is needed. You can call them for complete information at 874-2367, or just stop by the center on the fourth floor of Roosevelt Hall.

Disability Accommodations:

Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please be in touch with Disability Services for Students Office at 330 Memorial Union, 401-874-2098. I have no problem making any accommodations you may need, so please ask.

Sports or Other University Sponsored Events:

Please let me know the first week of classes if you need any accommodations made.

Course Grades:

The course is graded strictly by the grades you achieve on the homework/quizzes, the exams and the final. **There is no extra credit!** Any errors in grading must be brought to my attention within 1 week of the material being handed back. No changes in any grades will be made after that point.

Exams: 60% of Grade

Format: 8 short answer questions, 3 parts per question. All work must be shown to get credit. Practice exams are posted on the course website.

Scaling: The exams will not be scaled; however, your lowest exam will be dropped. The class average is usually about a 70-75 (C to C+) once you add in the homework/quiz average. I will post the exact grading scale on Sakai.

Tentative Dates: **Exam 1 : 2/23 Exam 2: 4/3 Exam 3: 4/24**

Exam Rules: You will be assigned a seat in Pastore 124 during your regularly scheduled class time for taking all exams. Be sure to bring an ID to all exams. The exam that is placed on that seat will be printed with your name. **You must take this exam.** You will receive a zero for a grade if you are not in your assigned seat with the correct exam. Once you have started the exam, you are not allowed to leave the room until it is finished. You have the entire class time to complete the exam.

Alternate exam: An alternate exam will be offered from **6:30-7:50AM** on the day after the regularly scheduled exam in Pastore 124. If you prefer this time slot to your regular time slot, **you must email me by 5pm the night before your regularly scheduled exam.** I need this much notification to print a different version of the exam. If I have not received an email by 5pm, you may still show up for the alternate exam, but ten points will be deducted from your exam grade as a penalty. Also, I cannot guarantee space if you just show up, as space in the alternate exam is on a first-come, first-served basis. The alternate exam is not designed to be taken just because you waited too long to study for the original exam, it is for planned absences only, such as another exam that day or a planned class absence. If you miss both your regularly scheduled exam and the alternate exam for any reason, including illness, your missed exam will be your dropped exam. No other make-ups will be given.

Homework/quizzes: 10% of Grade

You will be required to register for "Connect" which is an online homework site. The information needed to get your code for the site and the link to "Connect" is on the course website. In addition, there will be several open-note quizzes given during class time that are primarily based on attendance. The quizzes are unannounced as you are expected to attend class regularly. Each quiz is worth 10 points and your lowest 2 quizzes/homework grades will be dropped. A missed quiz counts as one of your dropped quizzes unless you are to be out for an extended time. Missed quizzes or homeworks count as zeros and can significantly lower your grade.

Final: 30% of Grade

The final is cumulative and may cover any material in the notes, homework or mentioned in class for chapters 1-13. There is an exemption clause. If you get >90% on EACH of the three exams and have an average of >90% on quizzes you are exempt from the final. If you are exempt from the final, you receive an A in the course. **There is no other way to be exempt from the final.** You MUST take the final on your assigned date unless you have 3 finals scheduled on that day. If this occurs, you need to contact me before the last day of classes so we can get the problem resolved. The date and time of the final will be announced later in the semester.

Tentative Date: **May 3rd, 8-11am Pastore 124**