

Chemistry in Context

Instructor:	Dr. N. Ganapathi	Office – SCL 211
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Office hours:	Week days, right after class (see below), or by appointment by email.	
Required Text:	Chemistry in Context, by Middlecamp, C.H. et al., 8 th edition, ISBN 978-0-07-352297-5	
Class meetings:	Classroom: Sterling Chemistry Laboratory, room18 , classes start on Monday, July 3. Class hours: Monday thru Friday, 9:15 to 10:30 am	
Syllabus:	Chapters (and most subtitles in each chapter) in the textbook will be covered in numerical order; for details, look in the Syllabus menu. In class, basic and important chemical facts and concepts mentioned in each chapter will be discussed. Students need to study each entire chapter to appreciate how these facts and concepts help us understand what goes on in our everyday lives, and what we can / should do.	
Attendance	All class meetings will be mainly discussions of basic chemical concepts and facts. There will be a number of demonstrations to illustrate these concepts and facts. The instructor intends to make each class meeting interesting enough so the students look forward to each class meeting.	

Reading quizzes and Problem sets These will be administered on Sapling Learning. Please visit Saplinglearning.com, follow the instructions therein, and enroll yourself in Chemistry S101 in Sapling Learning. Please note that there is an enrollment fee of \$40. Additional details will be provided on the first day of class (**July 3, 2017**).

Reading quizzes. There will be one reading quiz for each class meeting. Students are expected to study the assigned pages in the textbook and complete the corresponding reading quiz on or before its due date and time, **prior to** coming to class. Everyone will be afforded to miss a total of **five** of these reading quizzes.

Problem sets. There will be one problem set per chapter. Students are expected to complete these on or before their assigned due date. **Important note:** The due date set for each problem set **includes one grace day**. Each problem set should be completed **before** its due date. Students are strongly **advised**, in fact **warned, not to wait** till a due date; doing so doesn't do anyone any good.

Midterm tests

Midterm test 1	July 14, Friday, during class time, 9:15 to 10:30 am
Midterm test 2	July 28, Friday, during class time, 9:15 to 10:30 am

Final exam

August 4, Friday 9 am till 12 noon

Grading: Problem Sets: 10%
Midterm test 1: 25%
Midterm test 2: 25%
Final Exam: 40%

An example: Suppose a student scores as follows: 1. A total of 1150 out of 1200 in reading quizzes plus problem sets; 2. 84 and 92 (each out of 100) in the two hour tests; and 3. 90 (out of 100) in the final exam. The student's final overall percent score is = $(1150/1200) \times 15 + (84/100) \times 25 + (92/100) \times 25 + (90/100) \times 35 = 89.9 \%$

Letter grades: At the end of the semester, the **class average** of the overall scores (as calculated above) will correspond to a letter grade of **B or B+**. Overall scores slightly less than the class average will correspond to a B, whereas overall scores slightly greater than the class average will correspond to a B+. Other letter grades will be assigned with reference to the class average, and by utilizing discernible gaps in the distribution of overall scores. In the hypothetical case where a vast majority of students' perform extremely well and are in a very narrow score range of scores, grades will be assigned based on letter grade assignments in previous years in the recent past.

Some friendly advice: Take this course with the attitude that you are taking it because you want to learn some chemistry, not because you have to. Chemistry S101 classes start on Monday, July 3. Do not miss a single class. If you must, it is your responsibility to obtain notes from a friend or classmate. Always keep yourself informed of everything that is happening in class, including demonstrations. The midterm tests and the final exam may have questions related to the demonstrations. Do not hesitate to seek help from Dr. G if and when needed. Do not procrastinate. Cultivate and display interest in the subject. To do well in the midterm tests and the final exam, make sure you can do all the problems in the **practice problem sets** (these will be posted in Canvas) on your own (with no help).

Syllabus and calendar: Chapters (and most subtitles in each chapter) in the textbook will be covered in numerical order. The first ten chapters will be covered for sure, the remaining two chapters depending on class pace. Given below is a tentative calendar.

Chapter 0	July 3	Chemistry for a sustainable future
Chapter 1	July 4 & 5	The Air We Breathe
Chapter 2	July 6 & 7	Protecting the Ozone Layer
Chapter 3	July 10 & 11	The Chemistry of Global Climate Change
Chapter 4	July 12 & 13	Energy from Combustion
Friday	July 14	Hour Test 1 Chapters 1 thru 4
Chapter 5	July 17 & 18	Water for Life
Chapter 6	July 18 & 19	Neutralizing the Threats of Acid Rain and Ocean Acidification
Chapter 7	July 19 & 20	The Fires of Nuclear Fission
Chapter 8	July 24 & 25	Energy from Electron Transfer
Chapter 9	July 26 & 27	The World of Polymers and Plastics
Friday	July 28	Hour Test 2 Chapters 5 thru 9
Chapter 10	July 31 & Aug 1	Manipulating Molecules and Designing Drugs
Chapter 11	Aug 2 & 3	Nutrition: Food for Thought
Friday	August 4	9 am Final exam, comprehensive