

Chemistry 102 (Summer 2015)

Course Guidelines

Instructor: Dr. Conrad Naleway
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Office Hours: MWF 12-12:45pm MWF and TTh by appointment.
Class Hours: Review Sessions: To be announced (typically day before exam!)

Text: Chemistry: The Central Science. Theodore E Brown, H Eugene H LeMay, H Eugene LeMay, Bruce E Bursten, Catherine Murphy, Patrick Woodward (Prentice Hall)

Please register for Mastering Chemistry as soon as possible, there is homework already assigned:
[MC_NalewayChem102Summer2015 \(Course ID= MCNALEWAYSUMMER2015\)](#)

Please note that the text is a secondary source of information to help clarify concepts presented in lecture. **The primary information is presented in class and also appears on website and lecture handout materials.**

Basic Calculators will be needed for homework assignments and exams but should have log/trig functions (typically under \$20). *Programmable calculators CAN NOT be used during exams,*
Website: conradnaleway/chem102summer

1. Solutions and their Behavior	(Chapter 13).
2. Chemical kinetics, reaction rates, and reaction mechanisms	(Chapter 14).
3. Chemical equilibrium in gas and liquid phases	(Chapter 15).
4. Acids and bases, equilibrium in aqueous solutions	(Chapter 16).
5. Additional aspects of aqueous equilibria	(Chapters 17).
7. Chemical Thermodynamics: Entropy and Free Energy	(Chapter 19).
8. Electrochemistry and electron transfer reactions	(Chapter 20).
9. Nuclear chemistry	(Chapter 21) (selected topics)

Exams: There will be three ninety-minute exams and one cumulative final exam. Each exam will consist of questions and problems representative of the text, lecture, and discussion material. A calculator, periodic table, and a **single page of notes (8.5 x 11 inches, both sides)** may be used during each exam.

The single page of notes must be included with the exam prior to hand-in. Each exam MUST be signed and this signature will be taken as a statement of honest, independent work. **Instances of academic dishonesty will warrant immediate failure of the course plus** referral to the Arts and Sciences Dean's office. All Exams must be handed **directly** to the instructor upon completion.

Exams will be graded and returned as soon as possible, usually the following class period. All grading questions, points of clarification, and grading errors must be brought to the instructor's attention during office hours no later than one week after return of the exam.

Quizzes and Assignments:

Multiple written assignments and quizzes will be assigned during the semester based on the text and lecture materials. Many of these will be group assignments but anyone in the group maybe asked to report outcome to the class. Completion and hand-in of ALL assignments will total 15% of the final grade.

Assignment of Grades: The following scale will be used:

$\geq 90\% - 100\%$	A
78% - 89%	B
60% - 77%	C
50% - 59%	D
$< 50\%$	F

* Plus and minus grades will be assigned at the ends of each grade scale

Final Grade will be assigned according to the following:

The weighted average of the **TWO seventy-five minute exams** plus the **cumulative FINAL**

*Here the two ninety minute exams will each be weighed **20%**;
Final Exam will be weighed **20%***

Preassignment MasteringChemistry Homework will represent **20%**

20% of the grade will be based upon participation and completion of in-class and outside of class Group Assignments!

An aim of the grading policy is to allow time and incentive for improvement. Chemistry is not easy to learn, but the process can be rewarding if extensive, daily effort is made to master fundamentals as they appear. Students are urged to contact the instructor to discuss problems before they become serious.

Problem Sets:

Multiple problem sets will be assigned during the semester based on the text and lecture materials. Assignments will come from both the MC homework site and supplemented with a few additional assigned problem sets.

Help/Review Sessions:

In preparation for exams, help/review sessions will be scheduled. Dates, times, and locations will be announced in class.

Xerox Materials:

There will be multiple handouts during the semester. These will include quizzes, problem sets, and old exams. Errors should be brought to the instructor's attention as soon as possible.

Schedule:

The typical MWF class day will begin with a short quiz and/or review of material (10-15minutes total) from preceding class; this will be followed by lecture on new materials and one 5 minute break approximately half way through period. Following class there will be a 10minute optional discussion session on topics just covered.

*Exam days will begin 15 minutes early with quick review followed by 75 minute exam, which will then be followed by a lecture after 10 minute break (**critical to stay for lecture!**)*

Tentative Schedule for Summer Session (Will be discussed 1st Lecture)

M	06/29/15	First Day of Class. We will begin with Intermolecular Forces and Solution Properties.
F	07/03/15	No Class on 4 th of July - Holiday
M	07/06/15	Completion of Chapter 13
		<i>4 classes</i>
F	07/17/15	Exam I (Start of Class): Material of Chapters 13-15 will be emphasized. <i>A lecture will follow the exam</i>
		<i>5 classes</i>
F	07/31/15	Exam II (Start of Class): Material of Chapters 16 and 19 will be emphasized. <i>A lecture will follow the exam</i>
		<i>2 classes</i>
F	08/07/15	Pseudo-Cumulative Final Exam with Emphasis on Chapter 20-21. The exam will address "focus topics" to be announced in class. Please note that attendance and completion of the final exam are Mandatory.