

Chemistry 102 Summer 2013

Course Guidelines

Instructor: Dr. Conrad Naleway

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Office Hours: MWF 3:30-4:20 MWF and near noon on TTh or by arrangement.

Class Hours: MWF 12:30 – 3:20, Review Sessions: To be Announced

Text: Chemistry: The Central Science. Theodore E Brown, H Eugene H LeMay, H Eugene LeMay, Bruce E Bursten, Catherine Murphy, Patrick Woodward (Prentice Hall) 12th Edition

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 (also found on LUC Sakai)

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) (<i>selected topics</i>)

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:

Multiple quizzes will be assigned during the semester based on the text and lecture materials. Completion and hand-in of each quiz will warrant **two point of credit applied to the up-coming exam.**

Assignment of Grades: The following scale will be used:

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

Final Grade will be assigned according to the following:

The weighted average of the **TOP TWO ninety minute exams** plus the **cumulative FINAL**

*Here the two ninety minute exams will each be weighed 25%;
Final Exam will be weighed 30% and*

Preassignment MasteringChemistry Homework will represent 10%

10% of the grade will float and will be based upon either the Exam grade OR the MC homework grade, whichever is higher

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 OWL 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 hand-outs 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 (20-30minutes total) from preceding class; this will be followed by lecture on new materials and one 5 minute break approximately half way through period (~2pm). Following class there will be a 10 minute optional discussion session on topics just covered.

Exam days will begin with the review at 12:15am followed by exam at 12:30am, which will then be followed by a lecture at approximately 1:45-3:20pm.

M	07/01/13	First Day of Class. We will begin with Intermolecular Forces and Solution Properties.
F	07/05/13	Completion of Chapter 14
		<i>2 classes</i>
M	07/15/13	Exam I at 12:30: Material of Chapters 14-16 will be emphasized. <i>A lecture will follow the exam at 1:30</i>
		<i>4 classes</i>
F	07/26/13	Exam II at 12:30: Material of Chapters 17 and 18 will be emphasized. <i>A lecture will follow the exam at 1:30.</i>
		<i>3 classes</i>
F	08/02/13	Exam III at 12:30: Material of Chapters 19 and 20 will be emphasized. <i>A lecture will follow the exam at 1:30.</i>
W	08/07/13	Last Class (final half of class devoted to Overview)
F	08/09/13	Pseudo-Cumulative Final Exam at 12:30. The exam will address five "focus topics" to be announced in class. Please note that attendance and completion of the final exam are mandatory.