

Chemistry 102 Summer 2011

Course Syllabus

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, Flanner Hall 133
Review Sessions: To be Announced

Textbook: *Chemistry and Chemical Reactivity* by Kotz/ Treichel/ Townsend or Brown et al.
Website: conradnaleway.net/chem102summer

This course will cover essential material of Chapters 13 - 20 and Selected Topics from 22-23
The topics will include:

1. Intermolecular Forces & Properties of Solutions	(Chapter 13 & 14).
2. Chemical Kinetics	(Chapter 15).
3. Chemical Equilibrium	(Chapter 16).
4. Chemistry of Acids and Bases	(Chapter 17).
5. Other Aspects of Aqueous Equilibria	(Chapters 18).
6. Entropy and Free Energy	(Chapter 19).
7. Electron Transfer Reactions	(Chapter 20).
8. Nuclear chemistry	(Chapter 23) (<i>selected topics</i>)
9. Chemistry of Transition Elements	(Chapter 22) (<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%, totally 50%;
Final Exam will be weighed 30% and*

Preassignment MasteringChemistry Homework will represent **10%**

AND a FLOATING 10% of GRADE will be assigned to which ever of the **THREE** (in-class exam averages, final exam or Homework) has the highest-grade value.

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 20 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.

W	07/06/11	First Day of Class. We will begin with Intermolecular Forces and Solution Properties.
F	07/08/11	Completion of Chapter 14
		<i>2 classes</i>
F	07/15/11	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>
W	07/27/11	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	08/04/11	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	08/10/11	Last Class (final half of class devoted to Overview)
F	08/12/11	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.