

NATS 1211, SCIENCE OF CONTEMPORARY ISSUES

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Text: THE CHEMISTRY OF EVERYTHING
Kimberly Waldron, 2007, Pearson/ Prentice Hall

Lectures: 1:00-1:50, MWF, Boettcher Auditorium

Laboratory: Boettcher West 15

Exams: There are two one-hour exams during the quarter, plus a two hour cumulative final exam. Exam questions will be similar to the problems assigned as homework and the problems discussed in lecture.

If you miss an hour exam, then your final exam will be counted twice and replace the missed hour exam. **THERE WILL BE NO MAKEUP EXAMS.**

If you take the two one hour exams and your grade on the final exam is better than an hour exam grade, **THEN YOUR FINAL EXAM WILL BE COUNTED TWICE AND REPLACE YOUR LOWEST HOUR EXAM GRADE.**

Quizzes: On Friday there will be a 15 minute quiz. Only the six best scores out of the seven quizzes will be counted. There are no makeup quizzes given, and no quizzes will be given outside of normal class time.

Homework: Each lecture has a group of homework problems assigned. The problems are taken from the Problem Section at the end of each chapter, and are chosen to help you for the hour exams. There are many additional problems at the end of each chapter. It is a good idea to work some of these extra problems in the areas where you are having difficulties. **THE HOMEWORK WILL NOT BE COLLECTED.**

Grading: Your final grade is based on a maximum of 1000 points, distributed as follows:

Hour Exams (200 points each)	400 points
Quizzes (35 points each)	210 points
Final Exam	200 points
Lab Reports	190 points

The final grades will be based on a curve representing the overall class performance. "A rough rule of thumb" is:

85% and above	A
75% to 84%	B
60% to 74%	C
50% to 59%	D
Below 50%	F

LABORATORY AND LAB REPORTS

The total lab report points will be 190 points and you must attain at least 50% of these (95 points) in order to pass the course.

Attendance is mandatory for the laboratory part of the course. You are required to do every lab. You must attend the lab section in which you are registered.

There are no makeup labs. If you miss your lab for any reason, you must get permission from your teaching assistant to do the lab in another section the same week the lab is offered.

Proper eye, skin and foot protection is required. In general, this will mean no shorts or open toed shoes will be allowed in the laboratory.

A format for all lab reports will be provided.

Reports will be due at the beginning of lab the week following completion of the lab. Late reports will be assessed a 20% penalty per day. Reports more than two days late will not be counted.

LECTURE AND LABORATORY SCHEDULE

DATE	TOPIC	HOMEWORK	LAB
Sept 11	Introduction to Course		No Lab this Week
13	Composition of Matter 1.1 – 1.6	1, 3, 4, 5, 7, 9, 13, 15, 18, 21	
15	Review Ch 1, Quiz 1	33, 37, 44	
18	Dirt 2.1 – 2.4	3, 4, 5, 7, 8, 11, 17, 25	Chemical Moles
20	Review, 2.5 – 2.7	15, 12, 19, 43	
22	Review Ch 2, Quiz 2	Review Ch 1 and Ch2	
Sept 25	Diamonds 3.1 – 3.3	3, 4, 5, 7, 9, 11, 26, 29	Molecular Models
27	Review for Exam		
29	Examination 1		
Oct 2	Diamonds 3.4 – 3.5	5, 7, 10, 25, 30	ID of Organic Cpds
4	Review, 3.6 – 3.7	26, 31, 39	
6	Review 3.1 – 3.7, Quiz 3	Study 3.8	
Oct 9	Review, 3.8 – 3.9	Review Ch 3 and Problems	Synthesis of Soap
11	Sample Test Problems, Ch 3		
13	Review Ch. 3, Quiz 4		
Oct 16	Salt, 4.1 – 4.3	1, 3, 4, 5	Analysis of Household Chemicals
18	4.4 – 4.5	8, 13, 15, 17	
20	Review 4.1 – 4.5, Quiz 5	Study 4.6 – 4.7	
Oct 23	4.6 – 4.7	6, 7, 9, 11, 19, 22, 23, 25	Analysis of a Stomach Antacid Tablet
25	Review Ch 4	Review Ch 4 Problems	
27	Sample Test Questions, Quiz 6		

30 Review Ch 3, Ch 4
Nov 1 Review Ch 3, Ch 4,
3 EXAMINATION II

Synthesis of Aspirin

Nov 6 Film, 5.1 – 5.2 7, 10, 12, 23, 24
8 5.3 – 5.5 1, 5, 8, 11, 17, 30
10 Review 5.1 – 5.5, Quiz 7

Swimming Pool Chem

Nov 13 5.6 – 5.7 15, 20, 39, 45
15 5.6 – 5.7 27, 28, 41, 47n
17 Review for Final

Help Session for Final
In all Labs

Nov 21 FINAL EXAMINATION Tue 12:00 – 1:50