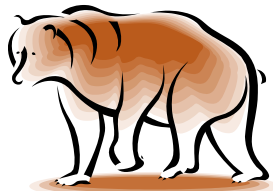


Chemistry 101/Fall 2014 Instructor: Dr. Alanah Fitch

	Mon	Tues	Wed	Thur	Fri
8:15-9:05	Disc. Flanner 105 8:05-9:05				 Research Day: Grumpy Animal Alert!
9:20-10:10					
10:25-11:15		Office Hours 10:25-12:00	Office Hours 10:25-12:00		
11:30-12:20	Discussion Flanner 7 11:30-12:20			11:30-12:45 Seminar	
12:35-1:25					
1:40-2:30			Group Meeting TBA in this time		
2:45-3:35		2:30-3:45 Cudahy 207		2:30-3:45 Cudahy 207	
4:00-5:00					

Week	Beginning On Mon	Tentative Chapters	Important Dates
1	Aug 25	1: Matter & Measurement	No Discussion
2	Sept 1	2. Atoms, Molecules and Ions	Labor Day: No Discussion Guest Lecturer Both Tues & Thurs
3	Sept 8	3. Chemical Rxns. & Stoichiometry	
4	Sept 15	4. Reactions in Aqueous Solution	Monday Sept. 15 EXAM I (Chapters 1-3)
5	Sept 22		
6	Sept 29	5. Thermochemistry	
7	Oct. 6		ECS meeting Oct 4-8 Mid Semester Break No class Tues, Oct. 7
8	Oct. 13	6. Electronic Structure of Atoms	Monday Oct. 13 EXAM II (Chaps 4-5)
9	Oct. 20	7. Periodic Properties	
10	Oct 27	8. Basic Concepts of Chem. Bonding	
11	Nov. 3	9. Molecular Geometry	Monday Nov. 3, EXAM III (Chapters 6-8)
12	Nov. 10	10. Gases	
13	Nov. 17	11. Liquids and Intermolecular Forces	
14	Nov. 24	12. Solids and Modern Materials	Mon Nov. 24 EXAM IV (9-11) Thurs Nov. 27 Thanksgiving Break
15	Dec. 1	13. Properties of Solutions	

Contact Information

Email: afitch@luc.edu

Please include a subject line Chem 101 because I get about 50 SPAM a day. E-mail may provide us access to rapid communication but do not expect an immediate response.

I will try to respond in a timely fashion but, I may not be able to respond to your email if I am away from the office, e.g. teaching, weekends, or after 5pm.

Phone 773-508-3119

Office Room 418, Flanner Hall

Skype: "leadlady", evenings, by apt.

Course Objectives:

Students are expected to learn chemical concepts and languages, solve exemplary problems, and to demonstrate that knowledge by the ability to interpret graphs and charge density images, as well as write a short paper on a compound of choice explaining how its observed properties relate to concepts learned in first semester general chemistry.

The three most important objectives for this class are:

- 1) Gaining factual knowledge (terminology, classifications, methods, trends)
- 2) Learning fundamental principles, generalizations, or theories
- 3) Learning to apply course material (to improve thinking, problem solving, and decisions)

Followed by the next two

- 4) Gaining a broader understanding and appreciation of intellectual activity
- 5) Acquiring an interest in learning more by asking questions and seeking answers.

Text Book and lecture notes

Text Book: BLBMWS, Chemistry, The Central Science, 13th Ed.

Lecture notes: posted before or shortly after discussed in class. You should NOT print and write notes on them as they are designed to allow various images/equations over-write. They are intended to be used as a review source after you have already heard the lecture in class.

Grading Policy

Academic Honesty: Students are expected to affirm their academic honesty on each exam. Exams examinations are designed to evaluate the knowledge and understanding of an individual and should be the product of one's own work. Plagiarism and cheating of any kind are serious violations and will result, minimally, in the grade of zero for the item with the possibility of an automatic failing grade for the course as well as referral to the Dean's office. For more information on the Academic Integrity policy at Loyola University please visit:

http://luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml

Grade % (Will not change)

Grade	%
A	88
B	75
C	60
D	50

There will be no rounding. For example, a grade:

87.9% < 88% ≠ A; = B

Point Accrual (May be subject to alteration)

	Pts. Poss	Points Allotted	Extra Credit topics
Four Exams	100		
	100		
	100		
	100	300	
Homework	120	100	
Paper		100	
Final		100	
Total		600	
Extra Credit		10	cartoons
		20	Determination of Heat Capacity of NH ₄ Cl
		20	Determination of the iron in a "standard solution" with oak gall extract

1) Exams (Best 3/4):

- Will contain 25-40% of problems exactly as worked in class, discussion section, or assigned problems. Students who can master that material work at a "C" level. A second section will contain problems (25-40%) similar to but inverted or backwards from those worked in class, discussion section, or assigned problems. Students who can master that material work at a C+-B range. Final problem(s) are based on a problem that has not been seen which requires the student to bring knowledge of 1 or 2 different types of problems previously worked into a new context. Students who can work these problems are considered "A" students.
- Each exam will also contain at least one descriptive essay question which requires the student to verbally describe the logic behind a mathematical or chemical principal.
- There are 4 exams, 1 of which may be dropped (IF you have completed all 4; or if you have presented evidence of a medical or significant conflict).
- All Exams will take place in Discussion Section on Mondays
- Cheat Sheet – you may bring a ½ sheet 8/11 paper, 1 sided with notes for the exam. It must be signed and turned in with the exam. It will not be returned to you.
- Students may use a graphing calculator for exams.

2) Problem Sets (Best 10/12):

- Problems are worked during discussion period. Active discussion participation plus completion and hand-in of each worked problem set counts as 10 points toward a 100 point total allotted to Problem Sets.

- Students are expected to practice problems in the text, **all of the ones for which there are answers!!!** “A” students generally successfully do 10 or more problems a night, amounting to 1 hour of work per day outside of class, daily. Exam problems will be drawn for those problems. HINT!!!
- 3) **Paper (100):** In order to relate the material you are learning to the “real world” and to assess your ability to think about as opposed to memorize equations you will be asked to pick two compounds; one a drug and the second an environmental contaminant and research the existing databases on their chemical and toxicological behavior. The paper should be of no more than two sheets of typed single spaced pages (1 for each compound).
- 4) **Extra Credit:** To be done on your own time, location, and with your own procedures.
Turn in Dates TBA
- a. The gall nut experiment requires you to boil up some oak galls. I have them available along with the “standard” iron solution.
 - b. The ammonium chloride heat capacity experiment is done using a commercial cold pack that can be bought at the drug store.
 - c. There will be no other extra credit possibilities.

Classroom Etiquette

- Students are expected to conduct themselves in a manner appropriate to a place of study and knowledge.
- Students are required to treat other students and instructors with respect.
- Cell phones should be in the silent position. If you are glancing at your cell phone it should be only briefly – watching of videos etc on your cell phone is a distraction to your neighbors.
- Refrain from talking and laughing and other destructive behavior. If you have questions, ask the instructor.