

## Loyola University Chicago

### Syllabus

**General Chemistry A** CHM 101 Sec. 001; Discussion 002,003,004      SPRING 2009

**Lecture:** M,W,F: 01:40 PM - 02:30 PM Flanner Hall 133

**Discussion:** 02:45 – 03:35 PM Flanner 105 M: 002; W:003; F:004

**Instructor:** Donald May    Contact: [dmay4@luc.edu](mailto:dmay4@luc.edu)

**Office:** Flanner Hall 403    Hours: M, W 05:00 PM – 06:00 PM

**Textbook:** Chemistry and Chemical Reactivity, Kotz/Treichel/Weaver, 6th ed., 2008.  
ISBN 0-495-45189-4

Study Guide and Solutions Manual

**Method of instruction:** Lecture and discussion.

**Grading:** Semester grades will be determined by the following criteria: 3 in-class exams and a comprehensive final exam (topics will be announced). See attached schedule. No early and no make-up in-class exams. For a single missed in-class exam the final exam will be utilized to determine a larger percentage of the course grade. Any subsequent missed in-class exams will be scored as zero. The student must have a valid and verifiable reason for missing the final exam, such as an extreme emergency, serious illness requiring hospitalization, and so forth. Oversleeping, not knowing the date and time of the final exam or not being prepared and so forth, are not valid reasons. If a verifiable and valid reason cannot be provided a zero score for the final exam will be recorded.

**Final course grade:** Generally the lowest A is 90%, the lowest B is 78%, the lowest C is 68%, the lowest D is 58%. Grades assigned will be: A, A-, B+, B, B-, C+, C, C-, D+, D, F

**Student Conduct:** At all times students are expected to conduct themselves in a mature and professional manner, which includes but is not limited to: arriving on time and prepared, treating everyone in class with respect, avoidance of extraneous comments, talking and small group discussions during lecture. Eating, drinking (food items) are not allowed. The student is responsible for taking care of all personal matters before class. Additionally radios, headphones, cell-phones, PDA's, mp3 players or similar devices must be in silent mode during lectures and are not permitted during exams. Disruptive and noncompliant students will be asked to leave. If a cell phone rings (beeps, buzz, etc.) during any exam, the exam will be collected and the student will not be allowed to continue. Suggested textbook homework problems will be given but the student will not be required to turn them in. Exam questions, however, will come predominantly from lecture notes and from concepts related to suggested homework problems. It is recommended that the student read through each chapter before lecture and eventually work through the suggested problems. Students must utilize their own calculator for exams: cell phone calculators are not allowed.

**Academic Integrity:** Consult the Undergraduate Studies Handbook for additional information. All exams are closed book and closed note. During exams violations include but are not limited to: cell phone ringing, opening a book-bag or back-pack during an exam, using unauthorized notes or books, looking at another student's exam, talking to another student, taking a copy of the exam from the room and so forth. Students caught cheating will receive an automatic "F" for the course and will not be allowed to drop the course. Further actions will also result. The student must bring their Loyola I.D. for each exam. Students are not allowed to leave the room during exams until their exam is turned in for grading. If you leave, you must turn in your exam and you will be considered finished. Please keep noises and sounds to a minimum. When leaving, be respectful and leave quietly.

**Lecture Outline** (tentative, subject to change)

Week	Date	Chapter	Topic	*
1	01/12	1	Matter, Units, Measurements	
	01/14	1	Conversions, Significant Figures	
	01/16	2	Atoms, The Mole	
2	01/19		NO CLASS HOLIDAY	
	01/21	2	Periodic Table	
	01/23	2		
3	01/26	3	Molecules, Polyatomic Ions	
	01/28	3	Compounds, Formulas	
	01/30	3		
4	02/02		EXAM I: Chapters 1-3	
	02/04	4	Chemical Equations	
	02/06	4	Stoichiometry	
5	02/09	4	Limiting Reagents, Percent Yields	
	02/11	4	Aqueous Solutions	
	02/13	5	Solubility	
6	02/16	5	Net Ionic Equations,	
	02/18	5	Concentrations,	
	02/20	6	Molarity and Stoichiometry	
7	02/23	6	Thermodynamics	
	02/25	6	Heat Transfer	
	02/27	6	Hess' Law, Enthalpy	
8	03/02		SPRING BREAK NO CLASS	
	03/04		SPRING BREAK NO CLASS	
	03/04		SPRING BREAK NO CLASS	
9	03/09		EXAM II: Chapters 4-6	
	03/11	7	The Hydrogen Atom, Atomic Orbitals	
	03/13	7	Electromagnetic Radiation	
10	03/16	7	Atoms and Electronic Configurations	
	03/18	8	Periodic Trends	
	03/20	8	Lewis Structures, Quantum Numbers	
11	03/23	9	Valence Electrons, Covalent Bonding Molecular Shapes	
	03/25	9	Bond Polarity, Bond Properties	
	03/27	9		
12	03/30		EXAM III Chapters 7-9	
	04/01	10	Bonding Theory, Hybridization	
	04/03	10		
13	04/06	12	Boyle's Law, Ideal Gas Law	
	04/08	12	Ideal Gases	
	04/10	12	NO CLASS HOLIDAY	
14	04/13	12	NO CLASS HOLIDAY	
	04/15	12	Stoichiometry Revisited	
	04/17	12	Kinetic Molecular Theory	
15	04/20	13	Intermolecular Forces, Liquids	
	04/22	13	Solids, Phase Diagrams	
	04/24	13		
16	05/04		FINAL EXAM 01:00 – 03:00PM	