

# Syllabus for Chemistry 101

## 8:30-9:45 am TTh

### Loyola University: Fall 2009

**Instructor:** Dr. Conrad Naleway; Office FH 422  
Office Hours: MW 10:30-11:30am MW and by Appointment

#### Meeting Times; Days & Rooms

Lecture: 8:30-9:45am, TTh in FH 133

Discussion & Quizzes:

1144	CHEM	101	002	DIS	11:30AM	12:20PM	Wed	FH	7
1146	CHEM	101	003	DIS	12:35PM	1:25PM	Wed	FH	7
1148	CHEM	101	004	DIS	2:45PM	3:35PM	Wed	FH	105

**Review Sessions:** There will be weekly optional review sessions typically on Sundays and *additional* review sessions prior to each exam. *Dates to-be coordinated during class.*

#### Materials:

**Text: Chemistry and Chemical Reactivity, Seventh Edition (2009)** by Kotz, Treichel, and Townsend. 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.**

Calculators will be needed for homework assignments and exams but do not need to be programmable, but should have log/trig functions (typically under \$20). Use of any electronic or mechanical communication device during examination is considered academic dishonesty and will result in immediate failure of the class (see details below)

**Website:** [www.geocities.com/conradnaleway/chem101](http://www.geocities.com/conradnaleway/chem101) (also found on LUC blackboard)

#### Exams:

There will be three 50 minute exams scheduled during the lecture periods and a cumulative final exam. All exams will consist of questions and problems representative of the lecture and text material. All answers to test problems must contain detail information illustrating the steps and method of solution. Answers must contain correct units since this is an essential aspect of the course.

All exams must be signed in the front, upper right hand corner. This signature will be taken as a statement of honest and completely independent work. Instances of academic dishonesty will

warrant **immediate failure** of the course plus referral to the Dean's office. For more information on university policy, please read: [http://www.luc.edu/cas/pdfs/CAS\\_Academic\\_Integrity\\_Statement\\_December\\_07.pdf](http://www.luc.edu/cas/pdfs/CAS_Academic_Integrity_Statement_December_07.pdf)

Exams will be graded and returned as soon as possible, usually the next 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 exam is returned**. There will be no exceptions to this rule! Each returned exam must be copied with original being returned to instructor with a hand written note stapled to exam addressing concern(s). **Only exams completed in INK are eligible for possible regarding.**

**Exam Grade** will be assigned according to the highest percentage computed by the two methods:

- a) The average of the three 50 minute class exams, each weighing 1/3, plus completion of the final exam even though not included in grade. **Please note that attendance and completion of the final exam are mandatory and a grade of at least 50% must be achieved!**
- b) The average of the top two 50 minute class exams plus the cumulative final. Thus the exams will weigh 1/3 each and the final will weigh 1/3. This relates to dropping the lowest in-class exam.

NOTE: **Grade is NOT based upon a class curve**. Thus individual performance determines one's grade and is not influenced by other's performance. This thus encourages each student to work collectively to help each other learn. Often discussing and working through a problem with someone else, helps one more than the other person, since it forces one to more critically see through a problem. Tutorial help is also available at the Tutoring Center, [www.luc.edu/tutoring](http://www.luc.edu/tutoring)

**Homework Problem Sets:** Several sets of problems will be assigned during the semester, roughly one each week. These assignments will largely utilize the **OWL** homework system which is discussed in detailed in the first few pages of the text (10%)

**Quizzes:** Several quizzes (roughly one per discussion period) will be given during the discussion periods (10%)

**Final Grade** will be based upon:

- 80% **Exam Grade (Above)**
- 10% **Discussion Quizzes and Participation, and**
- 10% **Homework (OWL)**

**Assignment of Final Grade:**

<b>A</b>	<b>100% - 88%</b>
<b>B</b>	<b>87% - 76%</b>
<b>C</b>	<b>75% - 60%</b>
<b>D</b>	<b>59% - 50%</b>
<b>F</b>	<b>&lt;50 %</b>

## **TENTATIVE** Schedule for Chemistry 101 (8:30am TTh Fall 2009)

Chapter	Topic	Pages		Class #	Class Date
1	Basic Concepts of Chemistry	1	23	1,2	8/25, 8/27
	Review of Tools of Qualitative Chemistry	24	49	3	9/1
2	Atoms , Molecules, and Ions	50	95	4,5	9/3,9/5
3	Chemical Reactions	112	157	6,7	9/10, 9/15
	<b>EXAM 1</b>			<b>8</b>	<b>Thursday, Sept 17</b>
4	Stoichiometry	158	207	9,10	9/22,9/24
5	Principles of Reactivity	208	253	11,12	9/29,10/1
	<b>FALL BREAK</b>				
6	Structure of Atoms	268	303	13,14	10/8,10/13
7	Structure of Atoms and Periodic Trends	304	347	15,16	10/15, 10/20
	<b>EXAM 2</b>			<b>17</b>	<b>Thursday, Oct 22</b>
8	Bonding and Molecular Structure	348	403	18,19	10/27 - 10/29
9	Orbital Hybridization	404	441	20,21,22	11/3, 11/5, 11/10
11	Gases and Properties	514	553	23,24,25	11/12, 11/17, 11/19
	<b>EXAM 3</b>			<b>26</b>	<b>Tuesday, Nov 24</b>
12,13	Intermolecular Forces, Liquids, and Solids	554	615	27,28	12/1 – 12/3
	<b>FINAL EXAM</b>				<b>Dec 12</b>