Chemistry 127 – General Chemistry
COURSE SYLLABUS
Fall 2009

INSTRUCTOR:

Dr. Darin J. Ulness
Ivers 334H
299–3582
Office Hours: M F 2:30–3:30
ulnessd@cord.edu

TIME:

Lectures: M W 8:30–9:40, F 8:00–9:20, Ivers 386
Lab: Ivers 359
Recitation: W 8:00–10:30p, Chemistry Tables.

MATERIALS:

Required Texts:
Whitten, Davis, Peck, Stanley *Chemistry* 8th ed.
My Notes

Lab:
Lab packet
Safety glasses are required

ACADEMIC INTEGRITY:

Academic integrity is expected all time during this course. Cheating in any form will not be tolerated. Such activity diminishes the quality of the course for all involved. Any cheating will result in elimination from the class.

EXAMINATIONS and QUIZZES:

We will have four examinations during the semester. Each one will account for 15% of your total grade (see calendar below for dates).**The examinations are to be performed individually and without unauthorized material assistance of any kind**. Academic integrity is expected.

In addition to the exams we will have very short daily quizzes. The quizzes will be held only during the first 5 min of class. There will be no time extentions and no make-ups. To account for excused absenses your five lowest quiz scores will be dropped. The total quiz grade will account for 15% of your total grade.

HOMEWORK:

Problem sets will be assigned every period and it will cumulatively account for 10% of your grade. You are *encouraged* to *work together* on the problem sets. **No late homework will be accepted**.

Homework is the single most important component of the course. You cannot learn the material to an acceptable level without being able to perform and understand the exercises.

LABORATORY :

Your lab grade will account for 15% of your overall grade. Your lab grade will be determined solely by your lab instructor.

GRADING:

The following grading scale will be used.

93+	A	80–82	B–	68–69	D+
90–92	A–	78–79	C+	63–68	D
88–89	B+	73–77	C	60–62	D–
83–87	B	70–72	C–	59–	F

TUTORING:

Chemistry tutoring is available in the Academic Enhancement and Writing Center (AEWC) located in the lower level of Fjelstad Hall. This is a service you must sign up for if you are interested. Tutoring is a two hour per week commitment for the duration of the semester to promote continuous learning and is available on a first-come, first-served basis. Contact Tayt Rinehardt in the AEWC (rinehard@cord.edu, 299-4551) for more information.

COURSE OBJECTIVES:

- To broaden problem solving skills
- To have a sense of where chemistry fits within the whole of science
  - To have a good sense of how chemistry applies to your field
  - To have a sense of how your field fits in relation to chemistry
- To master the fundamental principles of chemistry
  - To have the ability to solve problems of interest in chemistry
  - To be clear on how these principles relate to other areas of science

Date	Topic
4-Sep	Physical properties, changes
7-Sep	Measurement
9-Sep	Naming Molecules and Compounds
11-Sep	The mole
14-Sep	Chemical equations
16-Sep	Symposium
18-Sep	Stoichiometry
21-Sep	Limiting reagents
23-Sep	Molarity
25-Sep	Symposium
28-Sep	Net ionic equations
30-Sep	Exam 1
2-Oct	Light
5-Oct	Anatomy of the atom, periodic table
7-Oct	Bohr Model
9-Oct	Atomic Orbitals
12-Oct	Pauli exclusion and the periodic table
14-Oct	Periodic trends
16-Oct	Chemical bonding: Lewis dot structure
19-Oct	Chemical bonding: Lewis dot structure
21-Oct	Properties of bonds
23-Oct	Exam 2
28-Oct	VSEPR
30-Oct	Valence bond theory
2-Nov	Symmetry
4-Nov	Symmetry
6-Nov	Intermolecular Forces
9-Nov	Soutions
11-Nov	Phase Diagrams
13-Nov	Water
16-Nov	Redox reactions
18-Nov	Redox reactions
20-Nov	Titration reactions
23-Nov	Exam 3
25-Nov	Ideal gases
30-Nov	Ideal gases
2-Dec	Kinetic theory
4-Dec	Biochemistry
7-Dec	Chemical Signaling
9-Dec	Electrical Signaling
11-Dec	Electrical Signaling
14-Dec	Chemistry of Vision