CHE 120L-011
Course Syllabus

General Chemistry Lab I M 2:00 - 5:00 P.M. Spring 2005

Instructor Information
Vinay Kumar SC 446; telephone 572-5408; email: kumar@nku.edu

Office Hours: MWF 9:00 - 9:50, R 2:00 – 3:30
Other hours by appointment

Corequisite
General Chemistry I Lecture, CHE 120 (any section)

Required Lab Manual
Laboratory Manual for General Chemistry I (CHE 120L), Third Edition; Hicks Jr., W.Vernon, Niewahner, J.H., and Padolik, Laura; Department of Chemistry, Northern Kentucky University.

Other Required Materials (to be brought to the lab for each experiment)
1) Lab Record Book, Hayden McNeil Publishing; 2) Safety Goggles; and 3) Sponge Towel

Preparation
Students are expected to come to lab with a thorough understanding of the principles involved in the experiment, the goals of the experiment, the safety precautions, and the procedures to be followed. Whenever appropriate, the student should also know what data and observations are anticipated. This requires the student to read the entire experiment ahead of time and read all recommended reading materials.

Record Keeping
For instructions on keeping record of the lab work and how to maintain your note book, see page iii of the lab manual.

Pre-Lab Report:

Before coming to the lab the student should write the following information in the Lab Record Book. (see sample write-up on page v of the lab manual): [The Title of the experiment to be done that day, Objective/s, Safety Precautions and a Protocol]. A sample protocol is shown on page 3 of the lab. Manual. Make sure the steps of the protocol are numbered.

Note: As you carry out the experiment, record the data and observations next to the protocol (see sample format on page vi of the lab manual). At the end of the experiment, before leaving the lab. turn in the carbon copy the Pre- Lab Report including the data and observations to the instructor.

Lab Report

Except for the two experiments mentioned under the Introductions and Discussions section below, the Lab Report will consist of completing the Data Sheets (see pages 7-9 for example) with a pen in a neat and orderly fashion and also answering the Post- lab questions (see page11 for example). Data must be recorded to the proper number of significant figures, have the correct units, and be clearly identified. All pages must be stapled together in order.
Note: Lab report pages may also be found on the General Chemistry Website: http://www.nku.edu/~chemistry/general_chem/. These pages may be filled in using the keyboard and/or printed out and filled in by hand.

Introductions and Discussions
For the experiments entitled, "The Empirical Formula of Zinc Iodide" and "A Cycle of Copper Reactions", a written Introduction and Discussion will also be required in addition to the usual report. On pages xviii and ix of the lab manual you can find information on how the Introduction and Discussion are to be written.

Due Dates and Late Penalty
Reports are due at the beginning of the next lab period. Reports that are handed in after the next lab period will be considered late and will be assessed a 10% late penalty per week. If a report is more than two weeks late, a grade of 50 will be assigned for that experiment. If an experiment is completed, and no report is ever turned in, a grade of 30 will be assigned for that experiment.

Safety
All safety rules must be obeyed. Repeated violation of these rules will result in dismissal from the lab and a grade of zero for that experiment. Habitual violation of Safety Rules during the semester will result in dismissal from the course and a grade of F for the course.

Tests
There will be one test given on Feb. 28 and another on April 25. These tests will consist of both a practical portion and a written portion. The practical portion will be worth between 20 and 25% of the overall test score. The format for the practical portion will be distributed before the test.

Honor Code

As in all other chemistry courses the NKU Honor Code will be enforced in this section of CHE 120 lab. For more information on the Honor Code, please visit the Dean of Students website http://www.nku.edu/~deanstudents/HonorCode.htm

Grading

Most experiments will be graded on a 100-point basis except the experiments *Nomenclature* and *Lewis Formulas, Formal Charge, and VSEPR* will be assigned 50 points each.

Lab reports	=	60% of overall score
Tests	=	30% of overall score
Pre-lab reports	=	10% of overall score

Overall Score	Letter Grade
90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

Attendance Policy:
If a student misses a laboratory experiment with an emergency excuse, a makeup lab may be scheduled by contacting the instructor within 2 weekdays of the missed lab. The lab must be made up within one week of the missed lab. The student must obtain permission from the makeup lab instructor. Two makeup labs will be permitted. Failure to follow this policy will generally result in a grade of zero for a missed lab.

TENTATIVE Schedule

Dates	Experiments			
Jan. 10	Diagnostic Test, Check-In, Safety			
Jan. 17	MLK Holiday (no class)			
Jan. 24	Laboratory Measurements (p. 1)			
Jan. 31	An Introduction to Chromatography (p. 21)			
Feb. 7	The Empirical Formula of Zinc Iodide (p. 29)**			
Feb. 14	Synthesis of Alum (p. 109)			
Feb. 21	Chemical Reactions (p 35)			
Feb. 28	Lab Test 1 + Lab practical 1			
Mar. 7	Spring Break ---No Class			
Mar. 14	A Cycle of Copper Reactions (p. 79)**			
Mar. 21	Titration (p. 47)			
Mar. 28	Calorimetry and Hess's Law (p. 65)			
April 4	Absorption Spectroscopy (p. 87)			
April 11	Titration of Bleach (handout)			
April 18	Lewis Formulas, Formal Charge and VSEPR (p. 93)			
April 25	Lab Test 2 +Lab practical 2			

****For these two experiments introductions and discussions will be written.**

Please note: Instructor reserves the right to modify the syllabus at any time during the semester. Students are required to read and understand the contents of this syllabus. Any questions must be brought to the instructor's attention within one week of the distribution of this syllabus.