

**CHE 120L-19
COURSE SYLLABUS**

**General Chemistry I Lab
Section 19 Thurs. 9:25a.m.-12:25p.m. SC 422**

Fall 2004

Instructor: Julia Y. Bedell
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Office Hours: Wed. 9:45 a.m. -10:45 a.m.
Thurs. 12:30 a.m. – 1:30 a.m.
Other hours by appointment

PREREQUISITE: High school chemistry or equivalent

COREQUISITE: General Chemistry I Lecture

REQUIRED TEXT: Laboratory Manual for General Chemistry I 120L (3rd Edition)

REQUIRED MATERIALS:

Laboratory Record Book, Hayden McNeil Publishing
Safety glasses
Calculator, 3.25" disk or Zip 100 disk

COURSE REQUIREMENTS:

1. Preparation: Students are expected to come to lab with a thorough understanding of the principles involved in the experiment, the goals of the experiment and the procedures to be followed. This requires you to read the entire experiment ahead of time and prepare a prelab write-up in your lab record book and complete any pre-lab questions in your lab manual.

The complete **title**, **objectives**, and **protocol** must be written in the Lab Record Book before coming to the lab and the copies submitted to the instructor at the beginning of the lab period. The protocol is the set of experimental steps one *expects* to follow.

2. Lab Record Book: The lab record book is required for each experiment and each experiment must start on a new page. The whole heading on each page must be filled out. The laboratory record book will be used to write a protocol for each experiment (completed prior to lab) and to record changes, observations, and data collected during lab. Each record book entry should be written in **pen**. Please use complete sentences and always clearly record data to the correct number of significant figures and use appropriate units. An example is available in your lab manual (pages iii-vi). At the end of the lab the colored copies for observations, data, and calculations need to be stapled in the correct order and submitted to the instructor. Points will be assigned for neatness and organization.
3. Lab Report: For most experiments the Lab Report consists of completing the "Report" section in the lab manual. All written work must be legible to the instructor and independently written to receive credit. All pages are to be turned in stapled and in proper order.

4. Due Dates: Each report is due at the **beginning (9:25 a.m.)** of the following lab period. Reports received after this time are considered late and will be penalized by 10% for each day late. Students must turn in the report in order get credit for the experiment. If a student misses a lab class, it is his/her responsibility to turn in the report on or before the due date to avoid point deduction. **Reports will not be accepted after 5 weekdays from the original due dates.** Due dates are subject to change.
5. Tests: There will be two tests (see schedule below). These tests will consist of both a practical portion and a written portion. Programmable and graphing calculators are not permitted during tests. Under no circumstances may calculators be shared during tests.
6. Attendance: Mandatory attendance for every laboratory session. Students must attend the registered lab session and be on time. A tardy student will not be allowed to stay late in order to complete the experiment. If a student misses a laboratory experiment with an emergency excuse, a make-up lab may be scheduled by contacting the instructor within 2 weekdays of the missed lab (by Monday 10AM). The lab must be made up within one week of the missed lab. The student must obtain permission from the makeup lab instructor before showing up in the make-up lab class. Two makeup labs will be permitted but is not encouraged. Failure to follow this policy will result in a grade of ZERO for a missed lab.
7. Safety: Wearing of safety glasses, compliance with safety procedures (including proper waste disposal), and upkeep of the lab area comprise part of the student's participation grade. Instructor-initiated withdrawal of a student will occur if a student's conduct in the lab is judged to be unsafe. Safety rules are found in the lab manual on page vii. **No shorts or sandals are allowed in the laboratory.**
8. Email Account: All students are required to provide the instructor with an email address by the second lab class. Information such as assignments or any changes in the experiments or syllabus will often be provided by email. Students are responsible for this information.

In the Subject heading of your e-mail identify your class (**CHE 120L-19**) before you start on your message. I do not open e-mail messages without proper subject headings. My **reply** to your e-mail is your confirmation that I received the message.

GRADING SCALE:

A	100.0 - 90.0% of total points
B	89.9 - 80.0
C	79.9 - 70.0
D	69.9 - 60.0
F	59.9 - 0.00

GRADING:

See point assignments for each lab, shown below. Points will be divided as follows.

Safety Quiz	20 points
Prelab worksheets(PL)	10 points each
Lab Record Book(RB)	20 points each

Reports 50-60 points
 Introductions, discussions 20 points each
 Exams 150 points each

CHE 120L-19 LAB SCHEDULE:

Dates	Experiment Titles	*Prelab	Report	Points
Aug. 26	Check-In, Safety, Diagnostic Test		Quiz TBA	20
Sept. 2	Measurements (p.1)	RB, PL(p.5-6)	p.7-11	80
Sept. 9	Chemical Nomenclature		TBA	50
Sept. 16	An Introduction to Chromatography (p.21)**	RB, Intro	p. 25-27	90
Sept. 23	Empirical Formula of Zinc Iodide (p.29)**	RB, PL (p.31)	p. 33-34**	100
Sept. 30	Chemical Reactions (p.35)	RB, PL (p.39)	p. 41-45	80
Oct. 7	A Cycle of Copper Reactions (p.79)	RB, PL (p.83)	p. 85-86	80
Oct. 14	Test 1 (experiments thru Chemical Reactions)			150
Oct. 21	Synthesis of Alum (p.109)	RB	p. 113-114	80
Oct. 28	Titration (p.47)**	RB, Intro, PL (p.51)	p. 53-56**	120
Nov. 4	Calorimetry and Hess's Law (p.65)	RB, PL (p.73-74)	p. 75-78	80
Nov. 11	Absorption Spectroscopy (p.87)	RB	p. 91-92	80
Nov. 18	Lewis Formula, Formal Charge, and VSEPR		p. 99-107	50
Nov. 25	Thanksgiving Break			
Dec. 2	Ideality of Hydrogen Gas (p.57)	RB, PL (p.59)	p.61-64	80
Dec. 9	Check out, Test 2			150

*Due before starting lab. RB = record book (protocol) PL = prelab worksheet

**For these experiments *Introduction* and/or *Discussion* will be required.

IMPORTANT UNIVERSITY DATES:

September 11
 October 30

Last day to drop a class with an "X"
 Last day to drop a course with a grade of "W"

ADDITIONAL INFORMATION

- All items on this syllabus are subject to change by the instructor.
- The NKU Honor Code is in effect for all written work, quizzes, and exams taken in this course.
- Cell phones and pagers can only be used for emergency purposes.
- Students are responsible for reading and understanding all items on this syllabus. Any items not understood must be brought to the attention of the instructor by September 2, 2004.

- **If you withdraw from the lecture course, you MUST also withdraw from the lab course.**