

# CHEMISTRY 100: Chemistry in Context

## Spring 2008 Syllabus

**Instructor:** Dr. Holly D. Bendorf  
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**Course Schedule:** Lecture: MWF 10:15 – 11:05 in Heim 220  
Lab: T 9:45 – 11:35 or 1:00 – 2:50 in Heim 239  
Office Hours: MWF 2:00 – 2:50 pm, by appointment or just drop-by.

**Course Description:** CHEM 100, Chemistry in Context, explores current issues and events that are chemistry-related. These include air and water quality, the ozone layer, global warming, acid rain, nuclear energy, pharmaceuticals, and nutrition. The chemistry knowledge associated with these issues is built on a need-to-know basis.

### Text and Materials:

- "Chemistry in Context" (5th Edition), American Chemical Society
- "Laboratory Manual for Chemistry in Context" (5th Edition), American Chemical Society
- Safety glasses or goggles
- Chemistry in Context Web Site: [www.mhhe.com/cic](http://www.mhhe.com/cic)

<b>Grading Criteria:</b>	Quizzes (10)	100 points
	Exams (3)	300 points
	Laboratory	120 points
	Intro. Assignment	5 points
	<u>Writing Assignments (3)</u>	<u>75 points</u>
	Total	600 points

Course grades will be assigned as follows: 90 - 100% A, 80 - 90% B, 70 - 80% C, 60 - 70% D, below 60% F. These ranges include + and - grades.

**Exams** consist of short answer and brief essay questions. A few calculation-based problems may be included. **Please note that only non-programmable calculators may be used on quizzes and exams.** The three exams are scheduled for the following dates:

Exam 1: **Wednesday, February 13**  
Exam 2: **Wednesday, March 26**  
Exam 3: **Monday, April 21 at 9:00 am**

**Quizzes** will be given each week. They are intended to help you assess your progress and to alert you to any "trouble spots" before you take an exam. The lowest quiz grade will be dropped. Questions on the weekly quizzes will come from the homework, reading and lecture notes.

Quiz dates: **January 16, 23, 30; February 6, 20; March 5, 12, 19; April 2, 9, 16.**

**Homework:** Homework will be assigned but not collected. You can check your answers to the homework problems on the class Moodle site: Go to moodle.lycoming.edu, login using your Novell password and choose CHEM-100. When prompted for a password (enrollment key), enter "chem100".

**Writing Assignments:** All distribution courses at Lycoming College have a writing component. There will be three 25-point writing assignments during the course of the semester. For these assignments, you will be asked to summarize opposing viewpoints on a controversial issue and to describe and defend your own opinion. Additional information on these assignments will be provided in class.

**Laboratory:** Labs are intended to enhance and illustrate the concepts we discuss in class. Each lab will have a response sheet that will be completed during the laboratory meeting. Response sheets are graded on a 10-point scale. There are thirteen labs, twelve of which will count towards the final grade (the lowest lab grade is dropped). Students who complete all thirteen labs will receive a 5-point bonus.

Lab Safety: Unsafe behavior in the lab will not be tolerated and violations will be penalized. Repeated violations during a class may result in a zero for that lab. Safety glasses must be worn in the laboratory at all times. Keep in mind that lab safety also includes laboratory hygiene. In the event that common areas are left dirty, points may be deducted from the entire section's lab grade. If you have any questions regarding lab safety, please ask.

### **Attendance Policy:**

Lecture: Regular attendance at lecture is expected. Attendance at class means arriving on time, remaining in class for the entire 50 minutes, and participating in class. Missing part of a class (late arrival, early departure, etc.), sleeping or reading during class, or engaging in disruptive activities is equivalent to an absence and will be counted as such.

Students with perfect attendance or a single absence will receive a 3-point bonus. Students with more than three absences (for any reason) will have their grade reduced by 3 points for each absence beyond the third absence. Please note that I do not distinguish between excused and unexcused absences.

### Quizzes, Exams and Laboratory Meetings:

Attendance is mandatory. Generally, make-ups are **not** permitted.

Quizzes: Missed quizzes cannot be made-up (remember, the lowest quiz grade is dropped).

Exams: Exceptions may be granted for exams only if I am notified **prior** to the absence and there are extenuating circumstances -- usually a case of medical or family emergency that must be documented (note from doctor, notification from Dean). Missing an exam without prior approval from me will result in a grade of zero.

Labs: Missed labs can not be made-up. If you anticipate having a conflict with one or more lab meetings (i.e. traveling with an athletic team, etc), please talk to me ASAP.

**Electronic Devices:** You will need a simple calculator for lab and occasionally for class. Graphing (programmable) calculators may not be used on quizzes or exams. Cell phones, PDA's, and all web-enabled devices are banned from class.

**Academic Honesty:** Be aware that in accordance with the College's policy on academic honesty, any work you submit must be your own. Any instances of plagiarism will be penalized severely.

## CHEM 100 Lab Syllabus Spring 2008

Labs are intended to enhance and illustrate the concepts we discuss in class. Each lab will have a 10-point response sheet that you will complete before leaving the laboratory. There are thirteen labs, twelve of which count towards the final grade (the lowest lab grade is dropped). Students who complete all thirteen labs will receive a 3-point bonus.

**Lab Meeting Times:** Tuesdays, 9:45 – 11:35 or 1:00 – 2:50 in Heim 239

**Attendance:** You must attend the lab section for which you are registered. Arriving late to lab will result in points being deducted from the lab grade. Missed labs cannot be made-up.

**Lab Safety:** Unsafe behavior in the lab will not be tolerated and violations will be penalized. Repeated violations during a class may result in a zero for that lab. **Safety glasses must be worn in the laboratory at all times.** Keep in mind that lab safety also includes laboratory hygiene. In the event that common areas are left dirty, points may be deducted from the entire section's lab grade. If you have any questions regarding lab safety, please ask.

Week	Date	Experiment	Chapter in Lab Manual
1	1/8	Check-in	
2	1/15	Prep'n and Properties of Gases	1
3	1/22	What Protects Us from UV Light	5
4	1/29	Chemical Bonds, Molecular Models	7
5	2/5	Chemical Moles	9
6	2/12	Energy Content of Fuels	11
7	2/19	Petroleum, Gasoline and Refining	DVD
	2/26	Have a nice spring break!	
8	3/4	Building a Conductivity Tester	12
9	3/11	Reactions of Acids	17
10	3/18	pH Measurements of Common Substances	handout
11	3/25	Nuclear Technologies	DVD
12	4/1	Identification of Analgesic Drugs	25
13	4/8	Sugar in Soft Drinks and Fruit Juices	28
14	4/15	Polymer Synthesis	23