Chemistry 101 Course Policies

CHEMISTRY 101A
Instructor Gretchen M. Adams
Office 210 Chemistry Annex
Phone 217.244.8279
E-mail gadams4@illinois.edu
Office hours Tuesdays and Thursdays from 3–4 p.m. (after lecture) and by appointment
Website address www.chem.uiuc.edu

CHEMISTRY 101B
Instructor
Office
Phone
E-mail
Office hours
Website address www.chem.uiuc.edu

COURSE INFORMATION

Times:
CHEMISTRY 101A
Lecture Tuesday and Thursday: 2:00–2:50 p.m., 100 NL
Lab Wednesday
Discussion Friday

CHEMISTRY 101B
Lecture Tuesday and Thursday: 8:00–8:50 a.m., 100 NL
Lab Wednesday
Discussion Friday

Required Materials:
Lab manual: Chemistry 101 Syllabus and Lab Book, Fall 2009
Calculator: A simple calculator that performs scientific notation.
Safety goggles: These can be purchased in the bookstore.
Lab apron: This can be purchased in the bookstore.
Lab notebook: Any notebook designated for the lab, or college-ruled theme paper.
Usage fee card: This can be purchased at the Illini Union bookstore.

Grading:
Hour exams (3) 300
Final exam 300
Lab write-ups 250
Electronic HW 90
Clicker questions 20
Stoichiometry Workshop 20
TA Evaluation 20

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Exam Dates:
There will be three hour exams during the semester. These will be given from 7:00 p.m. to 8:15 p.m. on:

- Tuesday, September 22  (Chapters 1, 2, 3.1–3.5, 4, 5, 8, 13.1–13.9)
- Tuesday, October 27  (Chapters 6, 7.1–7.4, 9.1–9.4, 13.10, 15.1–15.2, 15.4–15.7)
- Thursday, December 3  (Chapters 10.1–10.3, 11, 12, 14.1, 14.3–14.4)

Conflicts for exams must be arranged ahead of time by signing up outside of 105 Chem Annex.

Final Exam:

The final exam will be cumulative. There is no scheduled conflict for the Final Exam. Do not make plans to leave campus before the Chemistry 101 final.

COURSE DETAILS

Lectures:

- **101A**: Lectures meet each Tuesday and Thursday from 2:00–2:50 P.M. in 100 Noyes Lab.
- **101B**: Lectures meet each Tuesday and Thursday from 8:00–8:50 A.M. in 100 Noyes Lab.

The purpose of the lecture is to present main concepts and ideas. The emphasis is on how to think about chemistry. Active participation (asking and answering questions) is required.

Discussions:

Discussion sections meet each Friday. This is the time to ask questions of a teaching assistant and to be asked conceptually challenging problems. Active participation is strongly encouraged.

Laboratory:

Labs meet each Wednesday. Always bring your textbook, lab manual and calculator to lab. You will perform the experiment or activity and complete as much of the lab write-up as you can before leaving the lab. If you decide to leave the lab early, you must turn in your lab write-up (anything not completed will be given a score of zero). Lab write-ups are due within the first five minutes of the next lab session or else NO CREDIT is given. The exceptions are the Review Questions before each exam. These are due at the end of the lab period in which you are to work on them. We also encourage you to turn lab write-ups in early!

**You must be present in lab to receive credit for the lab write-up. Late lab write-ups will not be accepted.**

Office Hours:

- **101A**: Office hours are on Tuesdays and Thursdays from 3–4 P.M. (after lecture). You can also make appointments to meet with me by seeing me after lecture, sending me an e-mail, or calling me on the phone.
- **101B**: Office hours are on Tuesdays and Thursdays from 3–4 P.M. (after lecture). You can also make appointments to meet with me by seeing me after lecture, sending me an e-mail, or calling me on the phone.

Your TA will have at least 2 hours of office hours each week. He/she will discuss these with you in class in both lab and discussion.
Electronic Homework:
You will be given electronic homework using an interactive web-based learning tool. These questions can be attempted an unlimited number of times for full credit before the due date.

Learning Center (212 Chem Annex):
General chemistry TA's will be available for assistance in the Learning Center from 9 A.M. to 5 P.M. Monday–Friday during the weeks classes are in session. Additional texts and study aids are available.

The hours of operation for the Learning Center are:
- Monday–Thursday: 8:30 A.M.–10:00 P.M.
- Friday: 8:30 A.M.–5:00 P.M.
- Saturday: 10:00 A.M.–5:00 P.M.
- Sunday: 1:00 P.M.–8:00 P.M.

CALENDAR—FALL 2009

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HE = Hour Exams  
S/F = Classes start/finish in Chemistry 101  
101A Final Exam Date = Wednesday, December 16 (7:00–10:00 P.M.)  
101B Final Exam Date = Wednesday, December 16 (8:00–11:00 A.M.)
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<tr>
<th>DATE</th>
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<td>Atoms, Molecules, and Ions</td>
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<td>Chemical Equations and Reactions</td>
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<td>Stoichiometry</td>
<td>9.1–9.4, 13.10, 15.6–15.7</td>
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<td>Stoichiometry Workshop</td>
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<td>Energy</td>
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<td>Modern Atomic Theory and Chemical Bonding</td>
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<td>Liquids and Solids</td>
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<td>101A FINAL EXAM: 7:00 – 10:00 P.M.</td>
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<td>101B FINAL EXAM: 8:00 – 11:00 A.M.</td>
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LABORATORY SCHEDULE

Introduction and Check-in  August 26
Activity 1: Measurements  September 2
Lab 1: Explorations with Gases  September 9
Review Questions for Exam I  September 16
NO LAB  September 23
Lab 2: Precipitation Reactions  September 30
Activity 2: Nuts & Bolts and Stoichiometry  October 7
Lab 3: Limiting Reactants  October 14
Review Questions for Exam II  October 21
NO LAB  October 28
Lab 4: Weak Acid Unknown  November 4
Lab 5: Modern Atomic Theory  November 11
Activity 3: Making Models of Molecules  November 18
Review Questions for Exam III  December 2
Final Lab Day and Check-out  December 9

ELECTRONIC HOMEWORK SCHEDULE

Assignment #1:  Friday, September 4, 4:00 p.m.
Assignment #2:  Friday, September 11, 4:00 p.m.
Assignment #3:  Friday, September 18, 4:00 p.m.
Assignment #4:  Friday, October 9, 4:00 p.m.
Assignment #5:  Friday, October 23, 4:00 p.m.
Assignment #6:  Friday, November 13, 4:00 p.m.
Assignment #7:  Monday, November 30, 4:00 p.m.
Assignment #8:  Wednesday, December 2, 4:00 p.m.
SUGGESTED TEXTBOOK HOMEWORK FOR CHEMISTRY 101

This homework is in addition to the electronic homework. Your TA’s will tell you the specific due dates for the particular problems they assign, and collect them at the beginning of Friday discussion sections. You are expected to understand all of the concepts in these problems. Each problem is found under the *Questions and Problems* section at the end of the chapter.

**Note:** Chapter 2 and Chapter 3 homework is due Friday, August 28.

**Text Homework for Exam I**

*Chapter 2*: 5, 7, 11, 26, 33, 35, 36, 37, 42, 68, 96

*Chapter 3*: 15, 18, 19, 20, 27, 28, 29, 32, 39, 57

*Chapter 4*: 9, 10, 13, 14, 19, 39, 41, 43, 53, 60, 74, 77, 83, 84, 91, 93, 104

*Chapter 5*: 9, 10, 13, 14, 17, 19, 22, 33, 35, 36, 39, 41, 43, 45, 50, 57, 60, 73, 77, 78, 83, 84, 91, 93

*Chapter 8*: 6, 8, 11, 14, 16, 18, 19, 22, 27, 29, 32, 34, 37, 46, 50, 52, 55, 58, 59, 66, 70, 77, 81, 92, 100, 118, 124

*Chapter 13*: 17, 21, 24, 31, 36, 37, 42, 43, 52, 56, 60, 69, 75, 77, 78, 81, 82, 105, 138, 146

**Text Homework for Exam II**

*Chapter 6*: 2, 6, 13, 16, 18, 19, 21, 24, 29, 34, 38, 40, 41, 43, 73, 76

*Chapter 7*: 11, 15, 18, 21, 22, 26, 40, 74

*Chapter 15*: 34, 35, 37, 41, 47, 55, 56, 58, 62

*Chapter 9*: 5, 12, 14, 16, 19, 24, 29, 35, 37, 45, 48, 51, 56, 90

*Chapter 13*: 85, 87, 113

*Chapter 15*: 64, 65, 67, 70, 71

**Text Homework for Exam III**

*Chapter 10*: 6, 8, 13

*Chapter 11*: 3, 7, 8, 12, 16, 19, 25, 26, 29, 31, 35, 39, 45, 47, 50, 51, 55, 58, 61, 63, 73, 74, 76, 77, 78, 95, 116

*Chapter 12*: 1, 7, 8, 11, 14, 16, 19, 23, 25, 33, 38, 40, 43, 44, 45, 48, 60, 63, 66, 67, 77, 78, 80, 81, 86, 110, 116, 119

*Chapter 14*: 1, 5, 7, 8, 9, 10, 11, 19, 21, 25, 27, 31, 74, 75, 76, 80