# Course Policy for Chemistry 102B/102C

**INSTRUCTOR FOR CHEM 102B/C:** Tom Hummel

3016 Chem Annex, 333-9111

Zoom Office Hours: Tues. 10-10:50, noon-12:50

and Thurs. 10-10:50, noon-12:50

tjhummel@illinois.edu

HOMEPAGE: http://chemistry.illinois.edu/clc/courses/chem-102-hummel

### **REQUIRED MATERIALS:**

1. *Chemistry-An Atoms First Approach*, 3<sup>rd</sup> ed., Zumdahl & Zumdahl

2. Student Solutions Guide for Chemistry-An Atoms First Approach, 3<sup>rd</sup> ed.

3. Electronic calculator with log function

#### WHEN AND WHERE:

- 1. Lectures for Chem 102B and 102C are online this semester. Each week, there will be two asynchronous lecture videos to watch. On Wednesday and Fridays of each week, discussion (quiz) sections are scheduled. The Chem 102B discussion (quiz) sections are inperson while the Chem 102C discussions sections are online through Zoom. The lecture videos are accessed through Lon Capa (a link to Lon Capa is on our homepage) and the schedule of when to watch the various videos is on our assignment pages. The discussion (quiz) sections on Wednesdays and Fridays are at the time indicated on your schedule. Major ideas will be introduced in lecture while discussion of these concepts, homework assignments, and related problem solving will take place during quiz sections.
- 2. Participation is very important in all facets of the course. One of the easiest ways to learn is to pay attention during lecture videos and discussion section, and to take good notes. The PowerPoint slides to each video are posted on Lon Capa. It may be helpful to print these off and take notes on them while watching the videos. Some new material will be covered in discussion (quiz sections), so lecture and discussion notes will be one of your primary resources.
- 3. Most students are required to take Chem 103, General Chemistry Laboratory, along with Chem 102. This 1 hour lab course provides demonstration of principles covered in Chem 102B/C .Reference the Chemistry 103 Experiments book for details concerning Chem 103. Chem 103 is totally in-person this semester.
- 4. Tom Hummel's office hours are at the times of the lectures (10 am Tuesday/Thursday for 102C students and noon Tuesday/Thursday for 102B students). These will be online through Zoom. No new material will be covered during the office hours. These are optional Q and A sessions. Tom Hummel will email students the Zoom links early in the semester. The zoom links to the office hours are also be posted on Lon Capa.

#### **GRADING:**

Lon-Capa Homework	70 pts.
Text Homework	30 pts.
Quizzes (6 total, no quizzes dropped)	100 pts.
Hour Exams (100 pts. each)	300 pts.
Final Exam	300 pts.
Total	800 pts.

Hour exam grades and the final exam grade will be scaled so that 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D and 0-59 = F. At the end of the semester, the course director will sum all the points together (800 total points) and will set overall course grades according to the 90, 80, 70, 60 scale, i.e., 800-720 = A, 719-640 = B, 639-560 = C, 559-480 = D and below 480 = F. With the plus/minus grading system, the grade cut-offs will be set so that 100-93.0% = A,  $92.9\text{-}90.0\% = A^{\text{-}}$ ,  $89.9\text{-}87.0\% = B^{\text{+}}$ , 86.9-83.0% = B,  $82.9\text{-}80.0\% = B^{\text{-}}$ ,  $79.9\text{-}77.0\% = C^{\text{+}}$ , 76.9-73.0% = C,  $72.9\text{-}70.0\% = C^{\text{-}}$ ,  $69.9\text{-}67.0\% = D^{\text{+}}$ , 66.9-63.0% = D,  $62.9\text{-}60.0\% = D^{\text{-}}$  and below 60.0% = F. Note: As explained below, the Lon-Capa and text homework grades will not be scaled while the 100 point quiz grade may be scaled.

**Lon-Capa Homework Grade**: Most weeks you will have electronic homework sets assigned which we call Lon-Capa homework. The Lon-Capa assignments can be accessed from the 102B/C homepage (<a href="http://chemistry.illinois.edu/clc/courses/chem-102-hummel">http://chemistry.illinois.edu/clc/courses/chem-102-hummel</a>). Sign-on instructions for Lon-Capa will appear after you select the Lon-Capa link on our homepage. The Lon-Capa password is your active directory (AD) password. The list of due dates for the various Lon Capa homework sets is on p. 6 of this handout. The Lon Capa assignment due dates are always at 9 a.m. Tuesday.

Your Lon-Capa homework grade (70 points) will be determined by how many of the assigned problems you complete correctly. Each problem is assigned a certain point value (usually 1 point). You receive all these points when you successfully answer that problem correctly (assuming all work is done before the deadline). After the deadline no credit can be earned. The Lon-Capa system will keep a running total of all points earned during the semester. At the end of the semester, we will prorate your total points earned from the online homework sets into a 70 point grade. If you do all assigned problems correctly by the deadline then you will earn a 70 (a perfect score) for your Lon Capa homework grade. If you do 90% of the assigned problems correctly then you will earn a 63 for your homework grade, etc. Since students can attempt each problem 99 times, all students in the course should have a perfect (or close to perfect) grade of 70. If you are ill and miss a Lon Capa assignment, contact Tom Hummel. Only he can extend Lon Capa due dates.

**Text Homework:** To do well in this course, you must do the assigned text problems as well the online homework problems. The assigned text homework problems have odd and even numbered questions and exercises. The odd numbered problems are answered in the Student Solutions Guide while the even numbered problems are not answered in this solutions manual. At various times during the semester, we will collect your answers to the assigned even numbered text homework problems to make sure you are trying to solve these problems. The assigned Review Questions will not be collected. The 30 point text homework grade will be determined by how many of the

assigned even numbered problems you made a serious attempt to solve. If you try to solve all even numbered problems and turn them in on time, then you will receive a grade of 30. Note: TAs will only check to see if you attempted the even numbered problems and will not correct your mistakes. It is your responsibility to have correct answers. We will post detailed solutions to all even numbered assigned homework problems and assigned Review questions on Lon Capa

Quiz Grade: During the semester, you will take six 50-60 minute online quizzes on dates to be announced. The quizzes will be accessed through Lon Capa. The purpose of the quizzes is to help you prepare for hour exams (content and time management). At the end of the semester, the score totals of the six quizzes will be prorated into a 100 point quiz grade. No quizzes will be dropped. I am not planning on scaling the quizzes. But if the scores on the 6 quizzes combined are too low, I will scale them so the grade distribution of the 100 point quiz grade is similar to the overall exam grade distribution. Note: All missed quizzes will result in a grade of zero, unless excused by the course director. In order to receive an excused grade, you should have a documented excuse or a letter from the Emergency Dean stating the reason for your absence. Tom Hummel is the only one who can excuse a quiz, so contact him if you miss a quiz for a good reason. If you receive an excused quiz grade, then an average grade of all your other quizzes will be assigned for the excused grade.

#### **EXAMS:**

- 1. We will take three exams during the semester on Wednesday September 29, Wednesday October 27, and Wednesday December 1. All exams are from 7:00-8:30 pm. The conflict exams are at 5-6:30 pm on the days of the scheduled exam. The exams will be accessed through Lon Capa with your TA proctoring you using your phone camera pointed at your work area. Details regarding proctoring of exams will be discussed later.
  - The final exam for Chem 102B is 7-10 pm Friday, December 10 and the final for Chem 102C is 8-11 am Thursday, December 16.
- 2. No alternate make-up exams will be given. If you must miss both the exam and the conflict, contact Tom Hummel immediately. Your exam score will be prorated if you have a valid, documented excuse. (See University regulations.)

#### TO DO WELL IN THIS COURSE:

- 1. The discipline of chemistry and of this course in particular demand that you take responsibility for your own learning. Major learning takes place during study and problem solving; the instructors are here to guide your efforts, but you must supply the initiative and hard work.
- 2. In addition to Lon-Capa homework, there are assigned homework problems from the text. The assignments for the semester are posted on our website in a separate document titled Chemistry 102B/102C assignments. In general, the reading assignment should be done

before viewing the lecture videos and the assigned problems attempted before discussion (quiz) section. Attempt to solve all the assigned problems, as most will emphasize different perspectives on a topic.

Solutions to over one-half of the assigned problems in the textbook are available in a recommended supplement called the *Student Solutions Guide for Chemistry*. Please use this resource in a mature way. Copying the solution to a problem to satisfy a homework assignment does not provide the practice required to gain proficiency and to perform well on exams. In order to acquire problem solving skills (numerical and conceptual), independent problem solving is required. This is the ultimate purpose of homework.

- 3. The Lon-Capa homework sets are not inclusive of all the types of problems expected for you to master. This is why additional homework problems are assigned from the text. To do well in this course, you must take both formats for homework seriously.
- 4. Read the assignment carefully. We will not cover every section of every chapter. You are responsible for all the **assigned** reading and problems.
- 5. It is impossible to learn the material we cover in lecture and in quiz section if you do not do your assignments regularly. Do not fall behind; it is extremely difficult to catch if you do fall behind.

#### **MISCELLANEOUS:**

1. The Chemistry Learning Center (CLC) a centralized location where all undergraduates enrolled in general chemistry can receive help with homework, meet with teaching assistants (TAs) and connect with other students taking the same courses. To ensure the safety of students and staff, the CLC's services have moved online to the Virtual CLC (https://chemistry.illinois.edu/clc/virtual-clc). You can enroll in the Chemistry Learning Piazza, a discussion board where student questions are answered by general chemistry TAs, or attend our daily drop-in Zoom meetings to meet with a TA online. For the Fall 2021 semester, the Virtual CLC will host two services: scheduled Zoom meetings, where up to 4 students can meet with a TA from their course, and limited in-person help sessions. The hours are 10 am-6 pm Monday-Friday. Please go to the CLC website to get the latest information!

We also encourage students to check out the Online Resources available on the CLC website (https://chemistry.illinois.edu/clc). We have over 30 online tutorials to assist students with basic general chemistry concepts. All tutorials were authored by CLC staff and are tailored specifically to the Illinois curriculum.

2. All grades in the course will be entered into an electronic gradebook accessed from our Chem 102B/C website.

- 3. Staff located in the Fred H. Turner Student Services Building, 601 E. John Street, offer a counseling service for emotional problems, test anxiety, and study skills. For critical problems and emergencies call the Emergency Dean at 333-0050.
- 4. The Office of Minority Student Affairs' (OMSA) Academic Services Center (ASC) offers free tutoring and academic services. Matched and drop-in tutoring along with Supplemental Instruction (SI), collaborative learning/study groups, and academic skills workshops are among the services featured in the OMSA ASC. OMSA's services are designed to help students achieve in college. The level of rigor at the University of Illinois is different than in high school or community college. No matter how you performed before attending Illinois, there is always room to examine and hone your study skills. To learn more about these services, visit <a href="https://omsa.illinois.edu/programs/tutoring/">https://omsa.illinois.edu/programs/tutoring/</a> or stop by the OMSA ASC located at 701 South Gregory Street, Suite I, Urbana, IL 61801.
- 5. If you have difficulty with any part of the course, please contact Tom Hummel or your TA promptly.

The office hours for Tom Hummel are during your scheduled lecture times via zoom: Tuesdays 10-10:50 am (for 102C) and noon-12:50 pm (for 102B); Thursdays 10-10:50 am (for 102C) and noon-12:50 pm (for 102B).

If you need to get in touch with Tom Hummel, please e-mail him at tjhummel@illinois.edu and he will get back to you as soon as possible.

## **DETAILS FOR WEEK 1:**

- 1. View this Course Policy video and the Lecture 1 video by Tuesday, August 24.
- 2. Attempt the assigned Tuesday Week 1 text homework problems before your discussion (quiz) section on Wednesday.
- 3. Attend the first discussion section on Wednesday, August 25 (either through Zoom for 102C students or in-person for 102B students). Bring questions on course policy or on material covered in Lecture 1 or from the first text assignment. Note that nothing will be collected on Wednesday.
- 4. The first two online (Lon Capa) homework sets (called Homework 1 and Homework 2) are both due by 9 am Tuesday, September 7.
- 5. The online quiz 1 needs to be taken by 6 pm Thursday, September 9. This quiz covers the material from the first five assignments. Your answers to the even-numbered assigned Zumdahl problems from the first five assignments will be checked in discussion (quiz) section on Wednesday, September 8. As always, answers to the assigned Review Questions are not required.

# CHEMISTRY 102B/102C LON-CAPA HOMEWORK DEADLINES

Homework #	<b>Due Date</b>
1 and 2	9 a.m. Tuesday, September 7
3	9 a.m. Tuesday, September 14
4	9 a.m. Tuesday, September 21
5	9 a.m. Tuesday, September 28
6	9 a.m. Tuesday, October 5
7	9 a.m. Tuesday, October 12
8	9 a.m. Tuesday, October 19
9	9 a.m. Tuesday, October 26
10	9 a.m. Tuesday, November 2
11	9 a.m. Tuesday, November 9
12	9 a.m. Tuesday, November 16
13	9 a.m. Tuesday, November 30

# **CALENDAR - CHEMISTRY 102B/C Fall 2021**

Week	1	August	M 23 S	T 24	W 25	Th 26	F S 27
	2		30	31	1	2	3
	3	September	6	7	8	9	10
	4		13	14	15	16	17
	5		20	21	22	23	24
	6		27	28	29 HE I	30	1
	7	October	4	5	6	7	8
	8		11	12	13	14	15
	9		18	19	20	21	22
	10		25	26	27 HE II	28	29
	11	November	1	2	3	4	5
	12		8	9	10	11	12
	13		15	16	17	18	19
		Thanksgiving	22	23	24	25	26
	14		29	30	1 HE III	2	3
	15	December	6	7	8 F	9	10FinalB
	16		13	14	15	16FinalC	17

HE = Hour Exams

S/F = Classes start/finish in Chem 102B/C

Final Exam Dates: Chemistry 102B: 7-10 pm Friday, December 10 Chemistry 102C: 8-11 am Thursday, December 16