# Course Policy for Chemistry 102B/102C

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

3016 Chem Annex, 333-9111 Office Hours: Mon.1-2:30 p.m. and Wed. 10-11:30 a.m.

tjhummel@illinois.edu

HOMEPAGE: <a href="http://www.chem.illinois.edu">http://www.chem.illinois.edu</a>, then choose Course Web Sites, and click on the icon for 102B or 102C.

## **REQUIRED MATERIALS:**

- 1. *Chemistry-An Atoms First Approach*, 2<sup>nd</sup> ed., Zumdahl & Zumdahl
- 2. Handouts for Chemistry 102B and 102C Fall 2019
- 3. Electronic calculator with log function

#### **RECOMMENDED:**

- 1. Student Solutions Guide for Chemistry-An Atoms First Approach, 2<sup>nd</sup> ed.,
- 2. i-clicker

### WHEN AND WHERE:

- 1. There will be two lectures and two discussion (quiz) sections per week. The 102B lectures are held at noon and the 102C lectures are held at 10 a.m. The lectures are on Tuesdays and Thursdays in 100 NL and the discussion sections are on Wednesdays and Fridays in the room and time indicated on your schedule. Major ideas will be introduced in lecture while discussion of these concepts and homework assignments will take place during quiz sections.
- 2. Attendance is very important in all facets of the course. One of the easiest ways to learn is to pay attention in lecture and discussion and to take good notes. Some of the material and applications covered in 102B/C are not presented in the text, so lecture and discussion notes will be one of your primary resources. Also, grades of zero are assigned when quizzes are missed. These have a real and adverse effect on semester grades.
- 3. Most students are required to take Chem 103, General Chemistry Laboratory, concurrently with Chem 102. This 1 hour lab course provides active demonstration of principles covered in Chem 102B/C and introduces experimental skills. Reference the Chemistry 103 Experiments book for details concerning Chem 103. Chem 103 starts the week of September 10.

#### **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.

Quiz totals, 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,  $92.9\text{-}90.0\% = A^{-}$ ,  $89.9\text{-}87.0\% = B^{+}$ , 86.9-83.0% = B,  $82.9\text{-}80.0\% = B^{-}$ ,  $79.9\text{-}77.0\% = C^{+}$ , 76.9-73.0% = C,  $72.9\text{-}70.0\% = C^{-}$ ,  $69.9\text{-}67.0\% = D^{+}$ , 66.9-63.0% = D,  $62.9\text{-}60.0\% = D^{-}$  and below 60.0% = F. Note: As explained below, the Lon-Capa homework grade will not 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://www.chem.illinois.edu">http://www.chem.illinois.edu</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 point total. You receive all these points when you successfully answer that problem correctly (assuming all work is done before the deadline). Any work after the deadline will not earn any credit (no exceptions). 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 homework problems correctly then you will earn a 63 for your homework grade, etc. Since students can attempt all problems as many times as they want before the deadline, there is no reason for any student in the course to have an online homework grade less than (or close to) perfect (70).

**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 answers you turn in. 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 problems in the Learning Center (2021 Chem Annex); ask the head proctor in 2021 Chem Annex for the Zumdahl text homework solutions for the specific chapter you want. Also available in the Learning Center are tutors from 9 am - 5 pm Monday-Friday for you to ask questions.

**Quiz Grade**: During the semester, you will take six ~40 minute quizzes on dates to be announced. 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 for each section will be scaled in order to insure consistency in grading. **No quizzes will be dropped** when determining scaled quiz scores. The end result of scaling is to insure that each section has about the same percentage of As, Bs, and Cs in the scaled 100 point quiz grade. Note: All missed quizzes will result in a grade of zero, unless excused by your TA or by the course director. In order to receive an excused grade, you <u>must</u> have a documented excuse or a letter from the Emergency Dean stating the reason for your absence. 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. The dates of the three hour examinations are: Wednesday October 2, Wednesday October 30, and Wednesday December 4. All exams are from 7:00-8:10 p.m. in rooms to be announced later. Conflict exams will be held at 5:35 p.m. on the same dates. You must sign up for conflict exams in <a href="mailto:advance">advance</a>. Conflict exam sign-up is located in 1026 Chem Annex. Sign-up generally begins one week prior to the night of the exam. Note the room assignment when you sign-up for the conflict exam and bring a picture ID to the exam. Please see or email Tom Hummel if you need to take a conflict to the conflict exam. The FINAL EXAM for Chemistry 102B is 1:30-4:30 p.m. Monday, December 16 and the FINAL EXAM for Chemistry 102C is 7:00-10:00 p.m., Wednesday, December 18.
- 2. No alternate make-up exams will be given. If you must miss both the exam and the conflict, contact your TA or 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 lecture and the problems attempted before quiz. 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.

### **MISCELLANEOUS:**

1. The Chemistry Learning Center (CLC), located in 2021 Chemistry Annex, is the key to succeeding in general chemistry at Illinois! Come to the CLC to receive drop-in assistance with homework, meet with teaching assistants (TAs), and connect with classmates. The CLC is staffed exclusively by general chemistry TAs, available to provide walk-in help **Monday through Friday**, **9 am to 5 pm**. For more information about our services, visit <a href="mailto:chemistry.illinois.edu/clc">chemistry.illinois.edu/clc</a>. Check out the growing collection of online CLC tutorials for help at any time of day. Texts are also on reserve in the CLC.

## **Learning Center Hours**

### **Tutoring Hours**

M-Th 8:30 a.m. - 9 p.m. M-F 9 am - 5 pm Fri 8:30 a.m. - 5 p.m. Sat closed

Sun 3 p.m. - 9 p.m.

- 2. All grades in the course will be entered into an electronic gradebook accessed from our homepage for 102B/C.
- 3. Most of the materials presented in lecture during the semester are available in a recommended book called Handouts for Chemistry 102B/C Fall 2019. Since we will be covering material very quickly, it is highly recommended that you obtain a copy of the Handouts book and bring it to lecture. This way you can concentrate on material being presented during lecture instead of furiously taking notes. If you have a previous edition of the Handouts book, you will be fine.

- 4. 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.
- 5. 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.
- 6. If you have difficulty with any part of the course, see the course instructor or your TA promptly.

The office hours for Tom Hummel are: **Monday 1-2:30 p.m. and Wednesdays 10-11:30 a.m.** in 3016 Chem Annex or by appointment.

If Tom Hummel is unavailable, please e-mail him at <u>tjhummel@illinois.edu</u> and he will get back to you as soon as possible.

## **DETAILS FOR WEEK 1:**

- 1. The first lecture is Tuesday, August 27.
- 2. The first meeting of 102B/C discussion (quiz) sections will be on Wednesday, August 28.
- 3. The first two online (Lon Capa) homework sets (called Homework 1 and Homework 2) are both due by 9 a.m. Tuesday, September 10.
- 4. The first quiz is scheduled for Wednesday, September 11 during your regularly scheduled discussion (quiz) section. 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 collected on this quiz day. As always, answers to the assigned Review Questions are not collected.

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

Homework #	<b>Due Date</b>
1 and 2	9 a.m. Tuesday, September 10
3	9 a.m. Tuesday, September 17
4	9 a.m. Tuesday, September 24
5	9 a.m. Tuesday, October 1
6	9 a.m. Tuesday, October 8
7	9 a.m. Tuesday, October 15
8	9 a.m. Tuesday, October 22
9	9 a.m. Tuesday, October 29
10	9 a.m. Tuesday, November 5
11	9 a.m. Tuesday, November 12
12	9 a.m. Tuesday, November 19
13	9 a.m. Tuesday, December 3

# **CALENDAR - CHEMISTRY 102B/C Fall 2019**

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

HE = Hour Exams

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

Final Exam Dates: Chemistry 102B: 1:30-4:30 p.m. Monday, December 16 Chemistry 102C: 7:00-10:00 p.m. Wednesday, December 18