
SCIENCE OF CONTEMPORARY ISSUES 3 – COURSE SYLLABUS

Chemistry in Context Chapters 9, 10, 11, and 12

University of Denver – CHEM 1003 – Spring Quarter 2015

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Office Hours: I will hold office hours in the SELC inside Anderson Academic Commons. Check our Canvas page for the times. Contact me 24 hours in advance to make an appointment at another time.

LECTURES

Section	Day and Time	Time	Location
01	Mon and Weds	12:00 noon – 1:30 pm	Sturm Hall 134
02	Tues and Thurs	10:00 am – 11:30 am	Sturm Hall 251

LABS

Section	Day	Time	Location
03	Mon	2:00 pm – 4:50 pm	Boettcher Center West 15
05	Tues	2:00 pm – 4:50 pm	Boettcher Center West 15
06	Tues	6:30 pm – 9:20 pm	Boettcher Center West 15
07	Weds	2:00 pm – 4:50 pm	Boettcher Center West 15

TEACHING ASSISTANTS

Name	Lab Sections	E-mail Address
Nicole Savage	03 and 05 (Mon and Tues Afternoon)	Nicole.Savage@du.edu
Molly Haugen	06 and 07 (Tues Evening and Weds Afternoon)	Molly.Haugen@du.edu

EXAM DATES

Exam	Section	Date	Time	Location
#1	01	Monday, April 13	12:00 pm – 1:30 pm	Sturm Hall 134
	02	Tuesday, April 14	10:00 am – 11:30 am	Sturm Hall 251
#2	01	Monday, May 4	12:00 pm – 1:30 pm	Sturm Hall 134
	02	Tuesday, May 5	10:00 am – 11:30 am	Sturm Hall 251
#3 (final)	01	Monday, June 1	12:00 pm – 1:50 pm	Sturm Hall 134
	02	Tuesday, June 2	10:00 am – 11:50 am	Sturm Hall 251

NOTE: Teaching assistants (TAs) will hold office hours in the Science and Engineering Learning Center (SELC) in Anderson Academic Commons. Their office hour schedules will be posted on our Canvas course page. For more info about the SELC, see Page 7 of this document. Feel free to visit the SELC at other times for help with this class from other TAs. The SELC is open from 9 am to 5 pm from Monday to Friday.

CANVAS COURSE WEBSITES: [HTTPS://CANVAS.DU.EDU/COURSES/11041](https://canvas.du.edu/courses/11041)

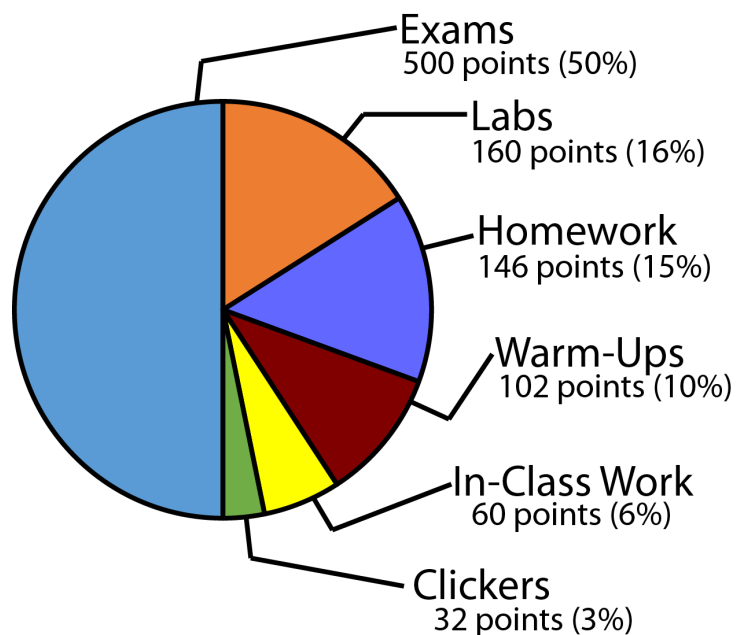
This is where you will go to find all of the important files, information, deadlines, etc. for CHEM 1003. I will use the course Canvas page to post all course files and communicate with the class.

- Configure your notification settings within Canvas so that you will **receive alerts for new announcements, assignments, grades, due dates, and course files.**

ASSIGNMENTS & GRADING

Assignment Category	Points	% of Grade	Additional Info
Exams	500	50	2 × 150 points and 1 × 200 points
Labs	160	16	8 × 20 points each (on average)
Homework	146	15	Individual assignments completed outside of class time; 4 × 35 points
Warm-Ups	102	10	1 per class; 17 classes × 6 points
In-Class Work	60	6	Group & individual assignments including end-of-chapter quizzes
In-Class Clicker Questions	32	3	During every class
TOTALS	1000	100	–

Letter Grade	Points
A	1000 - 930
A-	929 - 900
B+	899 - 870
B	869 - 830
B-	829 - 800
C+	799 - 770
C	769 - 730
C-	729 - 700
D+	699 - 670
D	669 - 630
D-	629 - 600
F	599 or fewer



USING THE LECTURE SCHEDULE AND LAB SCHEDULE

The next two pages are schedules for the **lecture** and **laboratory** portions of CHEM 1003.

You will use the schedules on pages 3 and 4 throughout the quarter – print them out now and consult them often!

CHEM 1003 Lecture Schedule

Week	Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
	Mar 22	23	24	25	26	27	28
1		Lecture 1 Ch. 9.0 – 9.4		Lecture 2 Ch. 9.5 and Worksheet			
	29	30	31	April 1	2	3	4
2		Lecture 3 Ch. 9.6, 9.7, pp. 418, 470 – 471		Lecture 4 Ch. 9.8 – 9.11			
	5	6	7	8	9	10	11
3		Lecture 5 Ch. 9 Review & Quiz		Lecture 6 Ch. 10.0 – 10.3 & catch-up			
	12	13	14	15	16	17	18
4		Exam 1 Chapter 9		Lecture 7 Ch 10.4 – 10.6			
	19	20	21	22	23	24	25
5		Lecture 8 Ch 10.7 – 10.10		Lecture 9 Ch 10 Review & Quiz			
	26	27	28	29	30	May 1	2
6		Lecture 10 Ch 11.0 – 11.2 & outside reading		Exam 2 Ch 10			
	3	4	5	6	7	8	9
7		Lecture 11 Ch 11.3 – 11.6		Lecture 12 Ch 11.7 – 11.10 & outside reading			
	10	11	12	13	14	15	16
8		Lecture 13 Ch 11.11 – 11.12		Lecture 14 Ch 11 Review & Quiz			
	17	18	19	20	21	22	23
9		Lecture 15 Ch 12.0 – 12.3		Lecture 16 Ch 12.4 – 12.5			
	24	25	26	27	28	29	30
10		Memorial Day Holiday No Class	Lecture 17 Ch 12.6 – 12.8 & Ch 12 Quiz		Exam Review		
	31	June 1	2	3	4	5	
11		Cumulative Final Exam Ch 9 – 12					

CHEM 1003 Lab Schedule

Week	Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
	Mar 22	23	24	25	26	27	28
1		No Lab This Week					
	29	30	31	April 1	2	3	4
2		Lab 1: Synthesis of Polymers					
	5	6	7	8	9	10	11
3		Lab 2: Synthesis of Aspirin		HW #1 Due			
	12	13	14	15	16	17	18
4		Lab 3: Analysis of Drugs & Aspirin (from Lab 2)					
	19	20	21	22	23	24	25
5		Lab 4: Extracting Fats from Foods				HW #2 Due	
	26	27	28	29	30	May 1	2
6		Lab 5: Library Project Research Session (Meet Inside the Library)					
	3	4	5	6	7	8	9
7		Lab 6: Fermentation by Yeast					
	10	11	12	13	14	15	16
8		Lab 7: Library Project Presentations				HW #3 Due	
	17	18	19	20	21	22	23
9		Lab 8: DNA Isolation					
	24	25	26	27	28	29	30
10		Memorial Day Holiday No Class	No Lab This Week	HW #4 Due			
	31	June 1	2	3	4	5	
11		Final Exam Week					

DESCRIPTION OF ASSIGNMENT CATEGORIES

Exams: Composed of multiple-choice, fill in the blank, and long-answer questions. Scores will be based on correctness. Long-answer and calculation questions that are not completely correct will be assigned partial credit. **Check the exam schedule now and make sure that you do not have any scheduling conflicts.** Bring a non-phone calculator to all exams.

Labs: You will meet *once per week* to perform experiments and learn new techniques. Lab points will be based on your preparedness and safety in lab, and your performance on lab report assignments. All lab files (and grades!) will be posted on Canvas, so check there for feedback.

- **Pre-lab assignments** are due at the beginning of the lab period. Most labs will include a pre-lab assignment. These assignments will help you mentally prepare to do the experiment. Therefore, you each need to turn in your own copy that represents individual thought and work.
- **Post-lab assignments** are due at the beginning of your next lab period. To complete Post-labs you will analyze your data, reflect on what you learned, and/or perform calculations. Since labs will be conducted in groups of two, you and your lab partner will have the same data, but you should each turn in your own report. *Matching reports will both receive grades of zero, so be careful not to work too closely with partners on these assignments.*
- **Lab attendance:** if you do not perform an experiment, your TA cannot accept your assignments for that lab. *If you are going to miss a lab, plan ahead and try to reschedule the lab. **The labs are a required component of the class – you will automatically fail this class if you miss two or more labs.***
- **Lab tardiness:** If you are late to lab by more than 10 minutes, you will miss the weekly safety lecture, and *you will not be allowed to perform the experiment.*

Warm-Ups: Before every lecture I will assign three to five questions. These are graded based on a thoughtful, complete effort, not on correctness. Warm-ups are due at 6:00 am before every lecture.

Homework: Composed of handed-in assignments and assignments submitted online. Graded on correctness with some partial credit.

Clickers: I will ask multiple-choice questions in class and you will answer with your clicker. Grades are based on participation, not correctness. In order to receive credit you need to register your clicker (if you have not done so already): go to the class Canvas page and complete the survey *Clicker Registration*. You will need your clicker in front of you to complete this survey.

LATE ASSIGNMENTS

Exams will be given once. Make-up or late exams will not be available. You may be able to take an exam early. Ask Joe about this during the first week of class if you have a scheduling conflict.

Pre-lab assignments are part of some labs, and are due within the first ten minutes of the lab period. If they are turned in after this they will receive a score of zero.

Post-lab assignments are due one week after the lab is completed. If they are not turned in within the first ten minutes of the lab period they will be late and will receive a score of zero.

Warm-up assignments will be used in class the next day; late submissions will receive zero credit.

Homework assignments are due online or in person. If they are late there is a 50% penalty. Homework assignments will not be accepted if they are more than 7 days late.

ABSENCES

Excused absences – if you are missing class because of a family emergency, illness, or a DU athletic event that you are competing in, submit documentation of the event from the Office of Health and Counseling, your physician, or the Athletics Office. This will allow you to reschedule some assignments and class activities.

Make-up assignments – If your absence is excused, make-up assignments and/or due date extensions can be arranged. It is up to you to complete the work that you miss, even if the absence is excused. Ask Joe or your TA about this when you submit documentation. If you do not provide at least 24 hours of advanced notice, we cannot guarantee that a make-up assignment will be available.

<p>If you will be absent for any required course activities during the quarter, tell us about it by the end of the first week of classes.</p>

Rescheduling Labs – you are allowed to reschedule **one lab period per quarter**. This must be done in advance and you will need approval from your TA and the TA whose section you will work with that week.

LAB SAFETY

Chemicals have a reputation for being dangerous. The truth is that chemicals are like tools – they are dangerous when they aren't used properly. Using chemicals safely comes down to these factors:

Clothing

Shoes must cover entire foot
No bare legs
Goggles must be worn at all times
No excessively baggy clothing
Wear gloves when using hazardous chemicals

Preparedness

Read the lab procedure and arrive ready to do the experiment

Learn about the hazards of the chemicals you will be using by looking up the MSDS for each chemical. See the *Canvas Lab Course* for more info.

Behavior

Do not bring food or drink to lab
Label all the containers that you use with their contents

Chemical Waste

Follow TA instructions for waste disposal
Never pour anything down the drain unless you are instructed to do so

If you are dressed inappropriately for lab, your TA cannot allow you to attend the lab session.

These rules are here to protect you from chemical spills, accidental fires, eye injuries, and tripping. Safety is our number one priority in the lab. **At the end of the quarter your TA will grade you on your lab safety and preparedness. This grade is worth one lab score!**

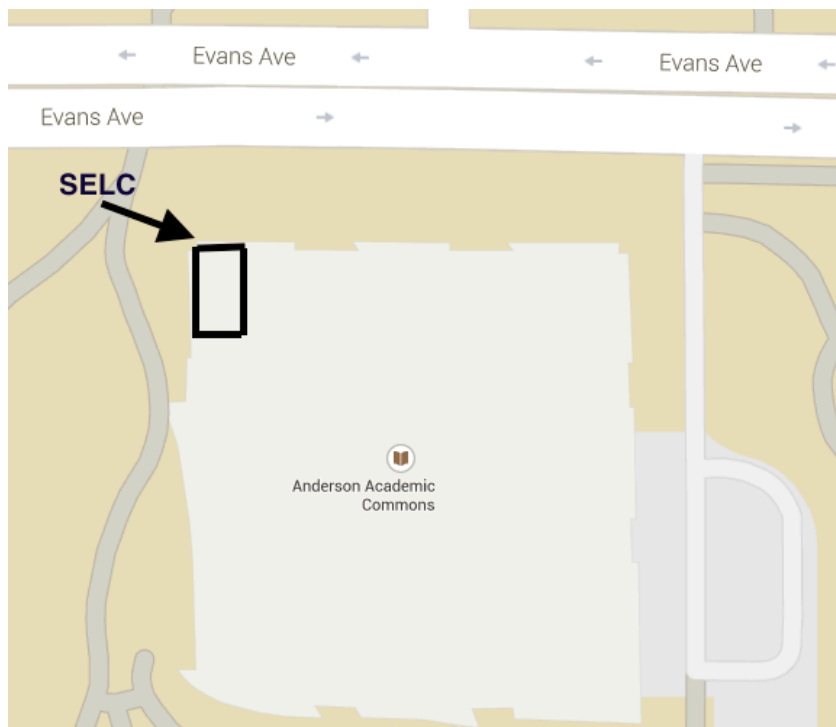
TECHNOLOGY IN THE CLASSROOM

Phones – Please do not use your phone in the classroom. Phones are distracting to you and to those around you. If I notice you using your phone I will ask you to exit the classroom.

Laptops – I will occasionally ask you to bring your laptop to class. You may want to bring your laptop to class at other times to take notes or look up definitions of words. **If you use a laptop to take notes, please sit in the back of the classroom.** The changing colors and motion of a computer screen distract students around you.

THE SCIENCE AND ENGINEERING LEARNING CENTER (SELC)

Need help in the class, but your schedule isn't compatible with my office hours? The SELC is a collaborative space staffed by undergraduate and graduate TAs trained to assist students with first and second year science courses. The SELC is *NOT* a one-on-one tutoring center – it is a place where students can get guidance from TAs as well as their peers, and where students can work together to learn and solve problems. The SELC is free and open to all DU students. Located in the Northwest corner of the first floor of the Anderson Academic Commons (West of the writing center). There is not a sign in this area; keep walking NW on the main floor and you will find the chemistry area overlooking Evans Ave as shown in the picture below.



ACADEMIC HONESTY

I strongly encourage you to do CHEM 1003 coursework in groups. Some of your best learning can happen when you explain what you know to someone who doesn't understand. **However, all work that you turn in should be your own.** The exams in CHEM 1003 count for half of your grade, and must be accomplished individually, so you need to be able to perform independently.

All members of the University of Denver are expected to uphold the values of Integrity, Respect, and Responsibility. These values embody the standards of conduct for students, faculty, staff, and administrators as members of the University community. Our values are defined as:

Integrity: acting in an honest and ethical manner

Respect: honoring differences in people, ideas, and opinions

Responsibility: accepting ownership for one's own conduct

For more information, consult these resources:

DU Honor Code Statement: <http://www.du.edu/studentlife/studentconduct/index.html>

DU Policies for Student Conduct: <http://www.du.edu/studentlife/studentconduct/policies/>

DISABILITY SERVICES PROGRAM

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Disability Services Program (DSP) to coordinate reasonable accommodations. The DSP is located on the 4th floor of Ruffatto Hall; 1999 E. Evans Ave. and can be reached at 303-871-2372. Information is also available on line at <http://www.du.edu/disability/dsp>; see the *Handbook for Students with Disabilities*. The DSP will provide me with an official notice of accommodations. I cannot provide accommodations without this step.

LEARNING EFFECTIVENESS PROGRAM

The Learning Effectiveness Program (LEP) provides academic support services beyond basic academic accommodations. <http://www.du.edu/studentlife/learningeffectiveness>

HEALTH AND COUNSELING CENTER

The Health & Counseling Center (HCC) provides many medical and mental health services. <http://www.du.edu/health-and-counseling-center/>

SCIENTIFIC INQUIRY – NATURAL AND PHYSICAL WORLD: STUDENT LEARNING OUTCOMES

Upon completion of this one year course sequence, students should become proficient in these areas and/or develop these skills:

1. Apply knowledge of scientific practice to evaluate evidence for scientific claims
2. Demonstrate an understanding of science as an iterative process of knowledge generation with inherent strengths and limitations
3. Demonstrate skills for using and interpreting qualitative and quantitative information