Chemistry 1141 Syllabus
General Chemistry I
Fall 2025

Instructor: Dr. Andy Napper

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Office hours: W 10:00 – noon | R 3:30 – 4:30 P.M. | F 11:00 – noon

Lecture: TR 9:30 – 10:50 A.M. (MAS 020)

Quiz: A 10-minute quiz will be given at the start of Tuesday's lecture. It will cover material from the previous week's lectures.

Lab: T 11:00 – 1:50 P.M. **Section 03**
R 11:00 – 1:50 P.M. **Section 04**

Attendance policy: Attendance at lectures is strongly recommended. Attendance at laboratories is required. *Two or more unexcused lab absences will result in a grade of F for CHEM1141.*

Excused absence policy: In case of illness, accident, family emergency, or university-sponsored activity, you may be excused from labs, quizzes, and/or homework. In case of a missed exam, a make-up exam will be provided.

For university-sponsored activities, you must email me **at least one-week before your absence** and let me know what quizzes/labs/exams you will be missing. Failure to do so may result in a grade of zero for any missed assignment.

If you feel ill on the day of an exam or an in-class activity please report your illness to me immediately. Failure to do so within 24 hours will result in a grade of zero. If you test positive for COVID-19 or are placed in quarantine, you are responsible for notifying me of the dates you will be absent and making up any missed coursework

For other absences, suitable documentation (such as a doctor's note, police accident report, etc.) must be provided by email **within one-week of the excused absence**. For absences longer than one week, an academic dean or the dean of students may issue you an excused absence which you can present to your instructor.

Unexcused absences will result in a grade of zero for the assignment.

Grading:

3 exams	45% (Massie 020)
Weekly quizzes	10% (Massie 020)
In-class activities	5% (Massie 020)
Final exam (Comprehensive)	15% (Massie 020)
Online Homework	10% (*Cyberspace*)
Laboratory	15% (Massie 339)

Required materials: *Chemistry*, 15/e (eBook, accessible via BlackBoard)
—Jason Overby
Note: you can also purchase a loose-leaf copy of the book for around $30 from the bookstore: ISBN: 9781266334474
Aleks360 (online homework)
—Bundled with the textbook or a separate access card
Chemistry 1141 Lab Manual, Fall 2025
—Andy Napper
A *non-programmable* scientific calculator (TI-30XIIS)
Safety goggles or visorgogs (ANSI Z-87 approved)

Final exam: Thursday December 11th, 8 A.M. (Massie 020)

Blackboard course-site: Notes, handouts, and other useful pieces of information will be available at the following URLs:
https://blackboard.shawnee.edu
https://chem1141.ssuchemistry.com

Online homework (ALEKS): You should log on to Aleks as possible! Online homework will be assigned on a weekly basis. The homework set may consist of tutorials, homework problems, and review problems. **Each homework set will be made available on Friday by 5 P.M. and will be due the following Tuesday by 9 A.M.**
• You will be able to access online assignments on Blackboard. They are in the Course Content section, under "ALEKS Science."
• The inclusive-access course-fee provides you with access to the textbook and an account with Aleks360 at a significant cost savings.
In addition, during the first week the following will need to be completed by Sunday at midnight. Allot about two (2) hours to complete this first set of assignments.
- ALEKS tutorial
- Initial Knowledge Check
- Review Module

HINT: It is highly recommended you do not complete the ALEKS assignments in a single sitting. Spread out your studying over several days for optimal benefit. Cramming the assignments into a single marathon session generally makes things less beneficial for learning and mastering the material.

In-class/online activities: In-class activities worth various points will be completed, unannounced, during the semester. You must be present for the ENTIRE class period to receive credit for in class activities. No make ups will be allowed; however, the excused absence policy will apply. For some in class activities you may be required to watch an online lecture before coming to class. There may also be some online assignments, which will be completed outside of class.

Cell-phone policy: Cell phones (and other similar electronic devices, such as laptop computers, netbooks, Chromebooks, iPads, Surfaces, smart watches, etc.) are not permitted to be used during exams and laboratory exercises.

Study requirements: To be successful in General Chemistry, you will need to study *at least* two hours outside of the classroom, for every hour spent in *lecture*.

Lecture material: We will be covering the following chapters in your textbook:

Chapter 1	Measurement and the Properties of Matter
Chapter 2	Atoms, Ions, and Molecules
Chapter 3	Mass Relationships in Chemical Reactions
	EXAM 1 (Thursday, October 9)
Chapter 4	Reactions in Aqueous Solutions
Chapter 5	Gases
Chapter 6	Thermochemistry
	EXAM 2 (Thursday, November 13)
Chapter 7	Quantum Theory and the Electronic Structure of Atoms
Chapter 8	Periodic Relationships Among the Elements
Chapter 9	Compounds and Bonding
Chapter 10	Structure and Bonding Theories
	EXAM 3 (Thursday, December 4)

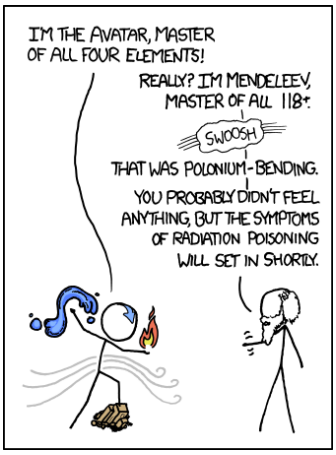
Exams 1 – 3: Exams 1 – 3 will be held in Massie 020 from 5 P.M. – 7 P.M. These will be joint exams that all sections of General Chemistry 1 will take together. A make-up exam will be available for students who have a time conflict or an official University excused absence.

University ADA statement:
Religious accommodations: https://www.shawnee.edu/syllabus-statements

General education program: Chemistry 1141 counts towards the Natural Science component of the General Education Program (GEP) and addresses *Scientific Reasoning*.

Laboratory information: Safety goggles or visorgogs are required to be worn for all laboratories. They must meet ANSI Z87 requirements (normally this information is permanently stamped on the goggles). Laboratory coats are recommended but not required. Full length pants or full-length skirts are required to be worn in lab. Shoes that cover all parts of your feet are also required. If you are improperly dressed for lab, you will be asked to leave and awarded a zero for the lab assignment.

Lab reports must be turned in *at the start* of lecture, one week from the date of completion (or the next lecture period in case of holiday/closing/etc.). Late lab reports can be turned in at the start of the next lab period but will be subject to a two-point deduction. Turned in lab reports must have your full name clearly written on the front page to receive a grade. If reports are completed with your assigned lab partner, all names must be clearly written on the front page.

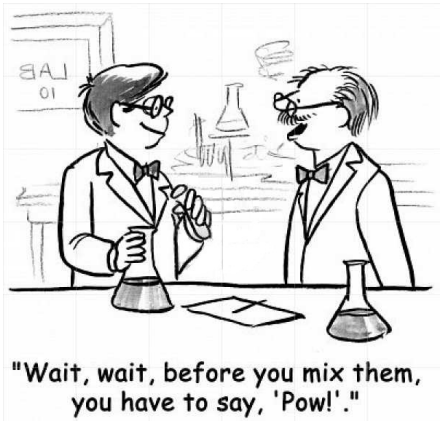


Order of labs:

Week Beginning	Tue	Thu
August 25	1	1
September 1	2	2
September 8	3	3
September 15	4	4
September 22	5	5
September 29	No labs (Fall break)	
October 6	6	6
October 13	7	7
October 20	8	8
October 27	9	9
November 3	10	10
November 10	Veteran's day	11
November 17	11	12
November 24	12	No lab (Thanksgiving)
December 1	13 & 14	13 & 14

Laboratories:

1. Check-in, safety, and conversions
2. Accuracy and precision
3. A forensic analysis of ink
4. Determining the formula of a hydrate
5. A forensic chemistry exercise involving empirical formulas
6. Double-replacement reactions
7. An introduction to titrations
8. Calcium carbonate determination of an eggshell
9. Determining the ideal gas constant, *R*
10. Calorie content of nuts
11. Determining the enthalpy of neutralization
12. Lewis structures
13. Molecular modeling using Hyperchem Lite 2.0
14. Check-out



Grading scale:

%	Grade	%	Grade	%	Grade	%	Grade	%	Grade
>93	A	87 – 90	B+	77 – 80	C+	67 – 70	D+	<60	F
90 – 93	A–	83 – 87	B	73 – 77	C	63 – 67	D		
		80 – 83	B–	70 – 73	C–	60 – 63	D–		

Note: To receive a grade of C– or higher, you must *either*
• pass (>59.5 %) at least two of the three semester exams, *or*
• score at least a 30th percentile on the ACS standardized final
If you fail to meet both requirements, the maximum issued grade will be a D+.

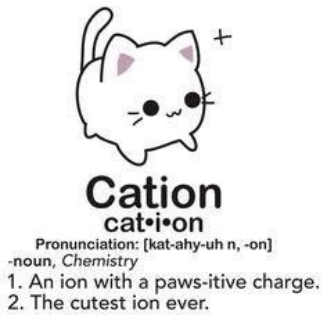
Grading errors: If you notice a grade error on BlackBoard for quizzes, exams, etc.—you need to bring it to the instructor's attention in writing within one week of the due date (for an online assignment) or one week from the assignment being handed back (lab/exam assignments).

Who should take this course? The typical audience for this course is: science, engineering, pre-pharmacy, pre-medicine, and science education majors. You may also be taking this course if you are interested in chemistry (yay!), are seeking to satisfy the natural sciences general education category, or curious about how things work.

Is chemistry hard? Yes. But not impossible. Consider setting aside several hours a week to practice end-of-chapter homework problems, forming a study group, re-reading your Aleks360 assignments, reading the textbook, and quizzing yourself. Reviewing old material every few weeks has been shown to dramatically improve retention of material in college!

Do I have to attend every lecture? Not attending lecture tends to correlate with doing poorly in chemistry. Do not get into the habit of missing class if you can possibly avoid it. At mid-term I will be reporting your expected grade and attendance to the Registrar. This information will be provided to your academic advisor(s), as well as student support services.

What should I do if I need help? If you need help—don't wait too long before you seek it out! The following is a partial list of options that are available to you:
• Student success center (SSC) tutoring. Stop by the SSC and sign up for a *free* tutor!
• Browse my course website for chapter objectives, old exams, lecture notes, quizzes, etc.
• YouTube. Amazing selection of videos on any topic you can think about. The *Khan Academy* videos are an excellent place to start.
• Office hours. I hold four office hours a week over three days. Stop by if you have any questions about the course!



How to study for this class

Buy a composition notebook to work problems in.

☐ *Skim* through the textbook section before you come to each class

☐ After each class, but before the next class, go through the Example problems in the chapter. Do the "Practice Exercise" problems after each example. You can click the "Answer" button in the eBook to reveal the solutions.

☐ In a separate notebook, answer the problems at the end of each chapter that go over the relevant sections. You can click the "Answer" button in the eBook to reveal the solutions

Before the exams:

☐ One week before each exam, thoroughly read your notes, being sure to work out any problems yourself that we went over. Try covering up my worked answers with a blank piece of paper and then working them yourself.

☐ Re-work the end-of-chapter and in-chapter problems

☐ Print off a practice exam and take it in a timed fashion. Print off the answers and then grade yourself.

Hint: 90 % of your studying in general chemistry should consist of working problems!

End-of-chapter problems

It is strongly suggested that you work the following problems which will serve as a guide for material for exams. The answers are available to you in the eBook for the **even**-numbered questions.

Chapter 1	6, 10, 20, 34, 46, 52, 56, 64, 82, 108
Chapter 2	6, 12, 16, 26, 28, 36, 48, 52, 60, 62, 76, 102
Chapter 3	6, 16, 18, 28, 40, 50, 58, 64, 72, 84, 92, 120
Chapter 4	10, 22, 44, 60, 66, 76, 84, 92, 98, 122, 144
Chapter 5	14, 18, 32, 44, 56, 72, 98, 108, 114, 126
Chapter 6	24, 34, 38, 54, 60, 76, 84, 98, 132
Chapter 7	4, 8, 30, 40, 50, 58, 72, 76, 88, 98, 114, 130
Chapter 8	12, 16, 24, 30, 44, 52, 60, 64
Chapter 9	4, 18, 38, 46, 52, 58, 66, 76, 84, 94, 100
Chapter 10	4, 10, 16, 26, 36, 42, 44, 62, 76, 86

Disclaimer: All dates and policies are subject to change as announced in class.