

Chemistry 1121 Syllabus

Principles of Chemistry

Spring 2026

Instructor

Dr. Andrew Napper

Office

Massie 323

Telephone

(740) 351-3100

E-mail

anapper@shawnee.edu

Office hours

Monday 2 – 3 pm
Wednesday 1 – 3 pm
Thursday 1 – 2 pm

Lecture

Monday 3:30 – 4:50 pm (Massie 204)
Wednesday 3:30 – 4:50 pm (Massie 204)

Lab

Monday 5:00 – 7:50 pm (Massie 333) – **Section 01**
Wednesday 5:00 – 7:50 pm (Massie 333) – **Section 02**

- Professor Mark Burchett (mburchett2@shawnee.edu) will be teaching the lab.

Attendance policy

Attendance at lectures and laboratories is required. *Two or more unexcused lab misses will result in an F grade for Chem 1121.* Missed labs cannot be made up. You may be excused from lab for illness (provided a doctor's note is made available to me clearly stating the days you were ill), or because of hazardous weather conditions.

Electronic device policy

Cell phones (and other similar electronic devices, such as laptop computers, netbooks, iPads, iPods, smart watches, etc.) are not permitted to be used during exams and lab.

University ADA statement

<https://www.shawnee.edu/syllabus-statements>

Religious accommodations

<https://www.shawnee.edu/syllabus-statements>

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, an official excused absence slip must be obtained. This must be obtained in advance of the activity and given to the instructor one-week before your absence.

For other absences, suitable documentation (such as a doctor's note, police accident report, etc.) must be provided 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.

Required materials

Fundamentals of General, Organic, and Biological Chemistry, 8/e
—McMurry, Ballantine, Hoeger, and Peterson.

MasteringChemistry—Bundled with the textbook or a separate access card

Chemistry 1121 lab manual

A **non-programmable** scientific calculator such as a TI-30XIIS

Safety goggles or visorgogs (ANSI Z-87 approved)

 Safety glasses are **not suitable**.

Note: you already have access to both the e-textbook and MasteringChemistry today!

Grading

4 exams	55 %
Online Homework	10 %
Final exam (Comprehensive)	15 %
Laboratory	20 %

Final exam

Wednesday April 29, 2 pm. (MAS 204)

Blackboard course-site

Notes, handouts, and other useful pieces of information will be available at the following URL(s): <https://blackboard.shawnee.edu>
<https://chem1121.ssuchemistry.com>

Lecture material

- Chapter 1 Matter and Measurements
- Chapter 2 Atoms and the Periodic Table
- Chapter 3 Ionic Compounds
- Chapter 4 Molecular Compounds
- Chapter 5 Classification and Balancing of Chemical Reactions
- Chapter 6 Chemical Reactions: Mole and Mass Relationships
- Chapter 9 Solutions
- Chapter 8 Gases, Liquids, and Solids
- Chapter 7 Chemical Reactions: Energy, Rates, and Equilibrium
- Chapter 10 Acids and Bases
- Chapter 11 Nuclear Chemistry

Exam schedule

- Exam 1 Mon, Jan 26
- Exam 2 Mon, Feb 23
- Exam 3 Wed, Mar 25
- Exam 4 Wed, Apr 22
- Final Exam Wed, Apr 29 (2 pm, MAS204)

Grading scale

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

Online gradebook

Grades will be posted on Blackboard (<https://blackboard.shawnee.edu/>). The grades will be weighted according to the percentages listed on the syllabus.

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).

Mastering chemistry (homework) and eTextbook

- The inclusive-access course-fee provides you with access to the textbook and an account with MasteringChemistry at a significant cost savings. The access-code for MasteringChemistry (for students who do not opt out of the inclusive-access plan) can be obtained by going to the “BNC Course Materials” course area on Blackboard, followed by clicking the “Reveal access code” link which should give you the required access code.
- You should log on and create your account as soon 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 pm and will be due the following Friday by 5 pm.
- You will be able to access online assignments on Blackboard via the “Pearson” link in the Course Content. The first time you take an assignment you will be required to log onto your MasteringChemistry account. After doing so, your account will be linked to SSU’s BlackBoard site, and you will not have to log in separately.

Homework

Problem solving is an essential part of your study of chemistry. As you study, you should be working problems from your textbook on each topic. It is strongly suggested that you work the following problems which will serve as a guide for material for quizzes and exams. The answers and worked-out solutions are available to you in the solutions manual for the even-numbered questions in the book. Answers to the even-numbered questions are found at the end of our textbook.

Chapter 1: 36, 44, 48, 56, 62, 68, 78, 88, 90

Chapter 2: 34, 40, 42, 46, 50, 58, 76

Chapter 3: 32, 40, 44, 48, 60, 64, 66, 68, 72, 74, 75, 80, 84

Chapter 4: 26, 32, 36, 48, 50, 52, 62, 66, 72, 74, 76, 82, 84, 94

Chapter 5: 18, 24, 28, 30, 34, 40, 44, 62

Chapter 6: 20, 30, 32, 34, 38, 42, 64

Chapter 7: 26a, 27a, 30a–b, 42, 46, 50, 60a, 60c, 62, 64, 66

Chapter 8: 26, 32, 34, 40, 42, 44, 48, 50, 52, 54, 58, 62, 64, 82, 86, 92

Chapter 9: 28, 36, 38, 42, 46, 56, 58, 60, 68, 76, 80, 80, 84

Chapter 10: 40, 44, 48, 50, 54, 56, 58, 66, 76

Chapter 11: 46, 48, 54, 58, 78

General Education Program

Chemistry 1121 counts towards the Natural Science component of the General Education Program (GEP) and addresses Scientific Reasoning.

Who should take this course?

The typical audience for this course are: health-science, nursing, medical laboratory technology, and middle-childhood 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.

Laboratory information

Safety goggles or visorgogs (NOT GLASSES!) 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.

You must remain in lab with your lab partner until the lab report is turned in. If you leave lab early you will be counted as absent and will receive a zero.

Lab reports must be turned in *at the end of each lab*. Late lab reports will not be accepted. Turned in lab reports must have your full name and your lab partner's full name clearly written on the front page to receive a grade.

Professor Mark Burchett will be teaching the laboratory part of the course. His contact information is:

Telephone: (740) 351-3895 or (740) 351-3456
email: mburchett2@shawnee.edu
Office: Massie Hall, room 403

Lab schedule

Week Beginning	Monday	Wednesday
Jan 12	1	1
Jan 19	No Lab	No Lab
Jan 26	2	2
Feb 2	3	3
Feb 9	4	4
Feb 16	5	5
Feb 23	6	6
Mar 2	No Lab	No Lab
Mar 9	7	7
Mar 16	8	8
Mar 23	9	9
Mar 30	10	10
Apr 6	11	11
Apr 13	12	12
Apr 20	13	13

Laboratories

1. TECH 380—Safety practices in the chemistry laboratory (handout)
2. REAC 399—Detecting signs of chemical change
3. PROP 602—Determining density
4. PROP 375—Separating the components of a ternary mixture
5. REAC 480—A sequence of chemical reactions: transforming copper
6. STRC 631—Visualizing chemical structures using Lewis models
7. Handout—9 Bottles: An adventure in chemical detection!
8. REAC 390—Double replacement reactions
9. STOI 388—The empirical formula of an oxide
10. PROP 615—Studying some aspects of solubility
11. Handout—Determining the ideal gas constant, R
12. EQUL 616—Introducing chemical equilibrium
13. EQUL 411—Estimating the pH of household products & CHECKOUT

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 MasteringChemistry 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 tutoring. Stop by the success center and sign up for a tutor!
- Browse my [course website](#) for old exams, lecture notes, quizzes, etc.
- YouTube. Amazing selection of videos on any topic you can think about. Good channels to start with are: [Melissa Maribel](#) and [Tyler DeWitt](#). Dr. Napper also has a [channel](#) with CHEM1121 lectures, too.
- Office hours. Stop by if you have any questions about the course!

Disclaimer

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

