

Chemistry 1121 Syllabus

Principles of Chemistry

Fall 2020

INSTRUCTOR Dr. Andrew Napper

OFFICE Massie 323

TELEPHONE 351-3100

E-MAIL anapper@shawnee.edu

OFFICE HOURS MTWR 2:00 – 2:50 pm (MAS323)

LECTURE Online (Accessed through BlackBoard via the “Online Lectures” sidebar)
Will post weekly lectures on Monday at 12:01 am

LABORATORY

T	5 pm – 7:50 pm (Massie 333) – section 01
R	5 pm – 7:50 pm (Massie 333) – section 02
W	2:30 – 5:20 pm (Massie 333) – section 03

ATTENDANCE POLICY

Attendance at 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.

EXCUSED ABSENCE POLICY

In case of illness, accident, family emergency, or university-sponsored activity, you may be excused from labs. 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

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

Fundamentals of General, Organic, and Biological Chemistry, 8/e
—McMurry, Castellion, and Ballantine

MasteringChemistry

Chemistry 1121 lab manual

A non-programmable scientific calculator such as a TI-30 XIIS
Safety goggles or visorgogs. (ANSI Z87)

GRADING

3 exams50 %
Final exam (Comprehensive) 15 %
Online Homework.....15 %
Laboratory.....20 %

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).

COURSE WEBSITE

PowerPoint lecture notes, practice exams, and other useful information will be posted on the course website: <http://chem1121.ssuchemistry.com>

GRADING SCALE

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

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

ONLINE GRADEBOOK

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

EXAM SCHEDULE

- Exam 1** Sep 22 (T) or Sep 24 (R) 3:30 – 4:50 pm - Massie 020
Covers everything from Aug 24 – Sep 20
- Exam 2** Oct 20 (T) or Oct 22 (R) 3:30 – 4:50 pm - Massie 020
Covers everything from Sep 21 – Oct 18
- Exam 3** Nov 19 (R) or Nov 24 (T) 3:30 – 4:50 pm - Massie 020
Covers everything from Oct 19 – Nov 15
- Final Exam** Dec 8 (T) or Dec 10 (R) 3:30 – 4:50 pm - Massie 020
Covers everything in course!

Note: You are assigned to *either* T(Tuesday) *or* R(Thursday) exam dates. Check your email to see which!

MASTERINGCHEMISTRY 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 Monday at 12:01 am, and will be due the following Sunday by 11:59 pm.

- You will be able to access online assignments on Blackboard. They are located in the “Online Assignments” tab on the left side of the screen. 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.

- 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) is:

PSCMTB-WHIRR-TRONE-WATAP-RUBBY-NONES

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

DISABILITIES

Any student who believes s/he may need an academic accommodation based on the impact of a documented disability should first contact a Coordinator in the Office of Accessibility Services, Hatcher Hall, 740-351-3106 to schedule a meeting to identify potential reasonable academic accommodation(s). Students are strongly encouraged to initiate the academic accommodation process in the early part of the semester or as soon as the need is recognized. After meeting with the Coordinator, students are encouraged to meet with their instructors during the instructor's office hours to discuss their specific needs related to their disability. The academic accommodation letter will be sent to the instructor and student via secure e-mail prior to the semester start date. Any questions regarding the academic accommodations on the letter should be addressed to the Coordinator of Accessibility Services. If a student does not make a timely request for academic accommodations and/or fails to meet with the Coordinator of Accessibility Services, a reasonable academic accommodation might not be able to be provided.

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.

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!

LAB SCHEDULE

Week Beginning	Tuesday section 01		Wednesday section 03		Thursday section 02	
Team	Blue	Gray	Blue	Gray	Blue	Gray
Aug 24	1	2	1	2	1	2
Aug 31	2	1	2	1	2	1
Sep 7	3	4	3	4	3	4
Sep 14	4	3	4	3	4	3
Sep 21	5	6	5	6	5	6
Sep 28	6	5	6	5	6	5
Oct 5	7	8	7	8	7	8
Oct 12	8	7	8	7	8	7
Oct 19	9	10	9	10	9	10
Oct 26	10	9	10	9	10	9
Nov 2	11	12	11	12	11	12
Nov 9	12	11	12	11	12	11
Nov 16	13	13	13	13	13	13
Nov 23	No LAB	No LAB	THANKSGIVING BREAK			
Nov 30	No LAB	No LAB	FINALS WEEK			

LABORATORIES

1. TECH 380—Safety Practices in the Chemistry Laboratory
2. **LABSTER:** Matter and phase changes: Distill ethanol
3. PROP 602—Determining density
4. **LABSTER:** Atomic Structure: Assess the possibility of life ...
5. PROP 375—Separating the components of a ternary mixture
6. **LABSTER:** Stoichiometric Calculations: Identify an unknown ...
7. STOI 388—The empirical formula of an oxide
8. **LABSTER:** Ideal Gas Law: Build your own temperature scale
9. REAC 390—Double replacement reactions
10. **LABSTER:** Solution Preparation: From salt to solution
11. EQU 411—Estimating the pH of household products
12. **LABSTER:** Acids and bases
13. **LABSTER:** Nuclear Chemistry: Understand the processes happening ...

LABSTER These virtual labs are available in BlackBoard and should be completed by the 11:59pm on the Sunday after your assigned lab date. For example: If your regular lab meets on Wednesday, November 11 and on this day you are assigned the Labster virtual lab, “Acids and bases,” you will need to complete the virtual lab exercise on BlackBoard by 11:59 pm on Sunday, November 15.

- Note: These virtual labs may be taken any number of times, **however the grade will be based upon your first attempt!**

- You will need to access these labs on a desktop or laptop computer using the most recent version of either the *Chrome* or *Firefox* web browser.

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 end of each lab. Late lab reports will not be accepted. Turned in lab reports must have your full name clearly written on the front page to receive a grade.

Professor Vincent George will be teaching the **Wednesday** laboratory part of the course. His contact information is:

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

Professor Sarah Weisner will be teaching the **Tuesday** and **Thursday** laboratory parts of the course. Her contact information is:

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

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 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. Stop by if you have any questions about the course!

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.

DISCLAIMER

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



Cation
cat•i•on

Pronunciation: [kat-ahy-uh n, -on]
-noun, *Chemistry*

1. An ion with a paws-itive charge.
2. The cutest ion ever.