CHEM 1017 Syllabus

Instructor Information

There is a team of people, including your instructor, who administer your laboratory course. The team can be reached at genchem@umn.edu with any questions you may have about your lab course, or to report issues with your TA.

Your Instructor

Professor Michelle Driessen is the final authority on any policy questions, curriculum decisions, extensions, disability-related accommodations, and final course grades. She is assisted by support staff, including the head TA. A member of the team will respond to your email questions and periodically check in on your laboratory meeting.

Class Background Information

Prerequisites

You must either be currently enrolled in CHEM 1015 (the lecture course) or have passed it during a previous semester at the University of Minnesota. See your instructor with questions.

Course Materials

- An Atoms First Approach to the Introductory Chemistry Laboratory, Laboratory Manual for CHEM 1017, Third Edition.
- Molecular model set. Suggested option: <u>https://www.amazon.com/Molymod-MMS-009-Inorganic-Chemistry-Molecular/dp/...</u>
- Goggles: Approved splashproof goggles are available at the bookstore. If you purchase them somewhere else, they must be marked with this code: ANSI Z87.1-1968.

Student learning outcomes addressed in this course include:

- Can identify, define, and solve problems
- is mastered a body of knowledge and mode of inquiry

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Dress Coae

You must be wearing approved safety goggles, have all skin covered from the chest down, and be wearing closed toe shoes in order to participate in the laboratory. If you do not come to lab dressed appropriately, with goggles, you will be asked to leave and may not have the opportunity to make-up the experiment. Please see the full dress code and safety goggle information in the front pages of your lab manual.

Safety

Each student is expected to follow all safety protocols/information found in the class Canvas site. In addition, each student must sign the safety contract in the course Canvas site before they will be allowed to participate in any experiment.

Any student found performing unauthorized experiments or behaving in an unsafe manner in the laboratory may be removed from the laboratory at any time. Whether or not behavior is unsafe is at the discretion of the instructors, and this includes failure to properly respond to instructions in a timely manner. Removal from the laboratory may be for a period of time as short as the remainder of the current lab period or as long as the remainder of the course itself, depending on the circumstances.

Canvas Site

There are multiple methods for finding the laboratory Canvas site. You may use the myU portal or login directly at http://canvas.umn.edu, Login and select the "CHEM 1017 Introductory Chemistry: Laboratory" link. You will find many useful links here AND your posted scores for each experiment.

To Prepare for Each Lab

- Read the experiment before lab.
- Complete the pre-lab questions before each lab.
- Attend your TA's office hour or tutor hour if you have questionson the pre-lab or experiment.
- Bring your U Card to lab each week. You will need it to check out lab equipment or for any extra charges you incur during the term.
- Listen carefully to your TA's instructions.
- Ask any questions that you still have concerning the experiment. If you have questions it is likely that a number of other students do as well.
- IF you are more than 15 minutes late to your lab meeting, you may be asked to leave lab.

Grades

Your TA should post your grades one week after you turn in your lab report. If you do not see your grade posted, please discuss this with your TA immediately and notify the instructor if the situation is not rectified. Any grade disputes should be taken up directly with your TA and advanced to the instructor if not resolved. Grade disputes must be lodged with the instructor prior to the last week of lab in order to gain full consideration. Your laboratory grade will be based on the average percentage of your lab reports and assigned using the following breakdown:

Α	94.0 - 100.0%
A-	92.0 - 93.9%
B+	90.0 - 91.9%
В	88.0 - 89.9%
B-	86.0 - 87.9%
C+	84.0 - 85.9%
С	82.0 - 83.9%
C-	80.0 - 81.9%
D	74.0 - 79.9%
F	< 74.0%

An automatic F will be applied to any student who fails the course because they failed to complete the experiment and turn in the completed lab reports for 3 or more experiments (3 or more zeros or incomplete reports). In other words, if you fail to 1) attend lab, 2) attempt & complete the entire lab report (and hand it in on time), and/OR 3) attend & complete all parts of multi-day experiments, in any combination, three times or more, you will fail lab.

University Athletes and Military Personnel

If you are a member of a varsity team at the University and will be traveling during the semester, or will have military duty that conflicts with more than 1 lab period, you are responsible for contacting the instructor or staff in Smith 115 **during the first week of classes** in order to be permanently moved to a lab section that minimizes scheduling conflicts.

Students with Disabilities

The University of Minnesota views disability as an important aspect of diversity, and is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC (612.626.1333, <u>https://disability.umn.edu/</u>) to arrange a confidential discussion regarding equitable access and reasonable accommodations. Students with short-term disabilities, such as a broken arm, can often work with instructors to minimize classroom barriers. In situations where additional assistance is needed, students should contact the DRC as noted above.

If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please contact your instructor (not your TA) as early in the semester to review how the accommodations will be applied in the course.

Scholastic Dishonesty

While you are encouraged to work, collect data, and study with your lab team members, all work that is turned in MUST be your own, individual work. Otherwise, identical papers are always assumed to indicate copying, and each identical paper will receive a grade of zero for all or part of the work. See detailed information in the class Canvas site.

Problems

Your TA will be happy to discuss questions and concerns with you. However, if there is an issue that you do not feel you can discuss with your TA, please contact the General Chemistry Team (genchem@umn.edu) and they will help resolve the issue.

Miscellaneous

Refer to your registration information for the location of your laboratory. Look for your name on the blackboards in the lab to find your TA section on the first day of lab.

You must attend the first lab meeting AND be on time to guarantee your place in lab. If you do not attend the first day, your spot may be forfeited and given to someone waiting to get into the course. If you are waiting to get into the course, see the staff in Smith 115 (624-0026) for more details.

Overlapping & Back-to-Back Courses

Enrolling in overlapping or back-to-back courses that does not allow enough travel time to arrive at our class meetings on time is prohibited. For more information, please see:

http://policy.umn.edu/Policies/Education/Education/OVERLAPPINGCLASSES.html

Student Conduct Code

As a student at the University you are expected to adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see:

http://regents.umn.edu/sites/default/files/policies/Student Conduct Code.pdf

Scholastic Dishonesty

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code:

http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University.

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty:

http://www1.umn.edu/oscai/integrity/student/index.html

If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonest in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Student Mental Health and Stress Management

As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. University of Minnesota Services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via

http://www.mentalhealth.umn.edu/

Teaching & Learning

The materials provided in this course are intended only for the students officially enrolled in this section and are to be used to learn and practice the course material. Disseminating class notes, videos, exams, etc... beyond the classroom community or accepting compensation (in the form of cash or trade, such as access to a study website) undermines instructor interests in their intellectual property while not substantially furthering instructor and student interests in effective learning. Such actions violated shared norms and standards of the academic community and are not allowed. For additional information, please see:

http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html

Sexual Harssment

https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual Harassment Sexual Assault Stalking Relationship Violence.pdf

Equity, Diversity, and Equal Opportunity

N \bigcirc elcome to this course individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability, and other visible and invisible differences. Instructors, teaching assistants, and students are expected to

contribute to a respectful, welcoming and inclusive environment for every other member of the class. This is in agreement with university policy:

http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf

For information on the Diversity and Inclusion Committee in the Chemistry Department, see:

https://sites.google.com/umn.edu/chemintranet/diversity-inclusion

Collaboration among people of all cultures and backgrounds enhances our experiences and contributes to excellence in teaching, learning, and research. We strive for a climate that celebrates our differences and strengthens our department by embracing and working to increase diversity, equity, and inclusion.

For the Gender and Sexuality Center for Queer and Trans Life, see:

https://gsc.umn.edu/

For gender-neutral restrooms in Smith and Kolthoff Halls and elsewhere on campus, see:

https://sites.google.com/umn.edu/chemintranet/accessible-gender-neutral-restrooms

Disability Resource Center

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CHEM 1017 Lab Schedule

Summer 2023

All lab meetings & due dates refer to your specific lab meeting time during the week listed. No work may be completed outside of lab, other than the labeled prelab pages in the manual.

Lab Meeting	Date	Experiment	What's Due	Text Reference
1	June 5	NO LAB MEETINGS		
2	Jun 7	Lab Syllabus, Expectations & Safety Expt 1: Neutral Atoms & Atomic Mass	Safety Exercise, Expt 1 Lab Report	Chapter 1
3	June 12	Expt 2: Flame Test & Electron Configurations	Expt 2 Lab Report	Chapter 2
4	June 14	Expt 3: Crystal Growth	Expte 3 Pre-Lab	Chapter 3
5	June 19	Juneteenth Holiday NO LAB MEETINGS		
6	June 21	Experiment 4: Elements & Compounds <i>No chemical makeup labs</i>	Expt 3 Lab Report Expt 4 Lab Report	Chapter 3
7	June 26	Expt 5: Introduction to Laboratory Measurements & Techniques (NO TUESDAY LAB MEETINGS) Mid-Semester TA Evaluations	Expt 5 Pre-Lab & Lab Report	Chapter 4
8	June 28	Expt 6: Determining Empirical Formulas	Expt 6 Pre-Lab & Report	Chapter 5
9	July 3	NO LABS - Holiday		

10	July 5	Expt 7: Chemical Models of Molecular Compounds No chemical makeup labs	Expt 7 Lab Report	Chapter 6
11	July 10	Expt 8: Determining the Ideal Gas Law Constant	Expt 8 Pre-Lab & Lab Report	Chapters 7 & 8
12	July 12	Expt 9: Molarity: Applying it to Colorimetry	Expt 9 Pre-Lab & Lab Report	Chapter 9
13	July 17	Expt 10: Net Ionic Equations	Expt 10 Pre-Lab & Lab Report	Chapter 10
14	July 19	Experiment 11: Limiting Reactants	Expt 11 Pre-Lab & Lab Report	Chapter 11
15	July 24	Makeup Lab & Clean Up** Complete TA Evaluations		

**Failure to attend this lab meeting will result in a 5% deduction in your final grade.

ALL LAB REPORTS are due at the beginning of your last lab meeting. There will be NO late reports accepted past this deadline for any reason.