CHEM 1015 Syllabus

Fall 2023 T/Th (002) 11:15-12:30, Bruininks Hall 412

Instructor Info

Dr. Michelle Driessen 113 Smith Hall
mdd@umn.edu 624-0062

Student/Office Hours will be held on Mondays from 9-10AM and Wednesdays from 12-1PM, via Zoom. Access Zoom links in the class Canvas site. Appointments are also encouraged if office hours do not fit your schedule.

Class Background Information

Chemistry 1015 (the online lecture only course) ***when taken with*** Chemistry 1017 (the laboratory component) is an introductory chemistry course with lab that meets the Core Physical Science requirement. A student may ask, "Why is this course considered an important component of my liberal education?" A liberally educated person is one who can understand complex issues, find credible information, analyze that information, problem-solve, and draw reasonable conclusions based on facts. You will find quantitative reasoning skills very useful in life. This course will develop these skills and prepare you to be an informed citizen and life-long learner.

Prerequisites

This course is intended for students who have had high school chemistry or an equivalent course. At least two years of high school algebra is also important for success. Proportions, exponents, logarithms, and anti-logarithms will be used extensively in this class.

Required Textbook & Materials

- *Introductory Chemistry: An Atoms First Approach*, by Burdge/Driessen (McGraw-Hill, 3rd edition) packaged with ALEKS (online homework access). Note that the e-book/ALEKS package will be charged to your student account – direct access can be found in our class Canvas site.
- Access to an internet-capable laptop or desktop computer (with webcam and microphone) to access our exam system for quizzes, midterms and the final exam.
- Scientific calculator (see requirements below).
- Mirror (around 6 x 6") and portable whiteboard (around 10 x 12") OR laminated formula sheet from the bookstore for use in our e-proctoring system (details in Canvas).
- You should strongly consider buying a molecular model set, especially if you plan to take more chemistry courses. You can find a link to purchase molecular models in our class Canvas site.

Calculators
The presence or use of graphing and/or programmable calculators is FORBIDDEN on exams. Their presence or use during an exam will be considered cheating. Only non-programmable calculators with limited memory will be allowed for use during exams. Any one-line display calculator is allowed. The TI-30Xa is the suggested calculator for this and all CHEM 1XXX courses. The bookstore stocks this calculator for around $10. The TI-30X IIS is an acceptable two-line calculator. Many other two-line calculators are programmable and would therefore not be allowed. If you have any questions about your particular calculator, see the instructor immediately. Calculators may not be shared during exams. *If you are concerned about battery failure during the exam, have a second calculator or extra batteries with you.*

Note that there is an online scientific calculator available for use in our testing system, which means you would not need to purchase one.

Class Websites

There are 2 websites associated with this course that you must visit frequently to keep up with the material.

Lecture Canvas Site
This site CHEM 1015 Introductory Chemistry: Fall 2023 is where you will find any information AND the lecture videos associated with our course. It will contain a class calendar, syllabus posting, and many resources to help you succeed in our course. You will find your exam and online homework grades posted here under "my grades".

ALEKS (publisher's website for online homework)
There will be a link from the Lecture Canvas site to the ALEKS homework system. Follow the instructions posted on this link to set up your account correctly.

Accessing Canvas
1. Connect to myu.umn.edu, log in, and
a. click on "My Courses" tab and select the appropriate class Canvas link
OR…
b. go directly to canvas.umn.edu, login, and select the appropriate class link.

Class Work

In-Class Activities
You will be completing in-class activities in groups, during class time. This is the time where you can apply what you are learning and get help from me and your peers. Attendance will be taken for each class meeting and credit will only be granted if you are present and working with your group for the entire class period. You will upload a photo of your in-class work at the end of each class meeting.

Each student is allowed two absences with no penalty. In rare cases a third absence may be granted, requiring documentation for a chronic illness or a DRC letter.

The University of Minnesota currently requires all students, staff, and faculty to wear masks when indoors regardless of vaccination status and requires students to get vaccinated for COVID-19. For resources on accessing vaccines and protocols if you experience COVID-19 symptoms, follow the information on https://safe-campus.umn.edu/return-campus/university-planning-response.

If you are unwell, please do not attend class in person. We will work around this – just contact me via email.

Expectations for Online Learning Environment
https://communitystandards.umn.edu/know-code/online-learning-expectations
Online "study sites" (examples: Chegg, Coursehero, etc.) have become increasingly popular and present challenges for faculty and other instructors in securing their proprietary lectures, exams, assignments, slide decks, notes, etc. Upload of instructional materials to these sites is a violation of the student conduct code. Additionally, utilizing information and/or copying work from these sites to aid them in any graded assignment (such as homework or exams) is likely a violation of the student conduct code.

Online Homework (ALEKS)
Homework will be completed using the publisher's online homework system, ALEKS. This is where you LEARN to apply our class concepts at a basic level. Work each week to complete these at 100% to get the most out of the process. The ALEKS homework grade will be recorded in two parts; meeting the deadlines for each weekly homework successfully AND final learning/mastery of the topics in the ALEKS pie. These can be found in the ALEKS gradebook. Read the instructions posted in our lecture Canvas site to set up your ALEKS account correctly (using your U of M email address) and to understand what is expected of you. Without doing so, you will not get credit for your online homework.

Practice Problems
To prepare for exams, beyond the practice from online homework problems, please see the list of problems for the end of each text chapter that is posted in our class Canvas site (and at the end of this syllabus).

Exams
There will be six midterm exams held every other week. They will be available for 24 hours, from Thursday at 4PM until Friday at 4PM. Once started, each midterm exam must be completed within one sitting, though there is no time limit. The final exam will be available from 10AM Friday, December 15th through 10AM Saturday, December 16th. All exams will be proctored online using Proctorio (see class Canvas site for details). See the schedule at the end of this document for dates and coverage.

The final exam will be comprehensive and cover all lecture material. Failure to take the final exam will result in an F for the course. **No exam, including the final exam, may be taken at any time other than that which has been scheduled. If you have conflicts with any of the scheduled times, you should resolve them now or drop the course. The *only* exception is if you are registered in another UM course that conflicts with the exam time. If you have a course conflict of this type, see me on or before Friday, September 8th.**

Exam Format
You must have a small whiteboard, your student I.D., calculator and mirror at each of the midterm exams and the final. I.D. checks will be made by the e-proctoring system. All midterm exams for this course will consist of 12 questions, including multiple-choice, short answer, ranking, and matching. The exams will be proctored and graded by computer. You are to use all formulas and constants provided within the exam to ensure credit. *Make sure you understand fully how to set up your computer and prepare for e-proctoring in advance of the actual exams.* ***Details are provided in the class website.***

Missed Exams
In the case of a true emergency, serious illness, or University-related trip that prevents a student from taking a quiz or midterm exam, an **excused absence may be granted**. To obtain an excused absence, students must contact the instructor in advance OR as soon as circumstances allow to discuss the nature of the emergency. Documentation will be required. The unweighted average score of all the student's other exams will replace the zero from the excused midterm exam. Only one missed midterm exam will be replaced in this fashion. If circumstances prevent a student from taking more than one midterm exam, a meeting must be scheduled immediately with the instructor to discuss any options available.

For information on missing the final exam, see "Incompletes".

Grades & Grading Policies

Your final course percentage will be based on the weighted average of your scores in each of 4 categories, according to the following breakdown. In the first three categories, you will earn points according to if/how much work you complete. As an example – if you complete a weekly ALEKS assignment at 75%, you would earn 3 of the 4 points available (75% of the possible points).

ALEKS Weekly Work: 12 assignments x 4 pts each = 48 pts maximum
ALEKS Final Pie: Pie Percentage x 24 pts = 24 pts maximum
In-Class Work/Participation: 24 class meetings x 2 pts each = 48 pts maximum
Exams: 184 pts maximum
Exam 0 – 4 pts
Exams 1 through 6 – 24 pts each
Final Exam – 36 pts

Course Total = 304 points
Your final course percentage (your points out of the available 304 points) will determine your final course letter grade using this scale. There will be no rounding or "bumping" of a score at the end of the semester.

A:	93.0-100.0%
A-:	90.0-92.9%
B+:	87.0-89.9%
B:	83.0-86.9%
B-:	80.0-82.9%
C+:	77.0-79.9%
C:	73.0-76.9%
C-:	70.0-72.9%
D:	60.0-69.9%
F:	< 60.0%

University grading policies and guidelines can be found at:
http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html

Other Grade Issues

Late Registration
Please be advised that joining the course after the start of classes does not excuse you from attendance or any work collected and/or graded. You should give careful consideration to this prior to late addition of our course.

Regrades
Request an exam regrade (in writing directly to the instructor via e-mail) by the end of the week following the posting of exam results. It is possible (but very unusual) for the questions to be scored incorrectly.

S/N Grading
If you are registered for this course on an S/N basis, a grade equivalent to C- on the A-F scale will be required to receive an "S". A D+ or below will receive an "N". Many programs or transfer courses do not like or will not accept S/N grades or will assume that they are the minimum possible grade. **Requests to change grading basis after the University deadline will not be approved.**

Incompletes
Students who have an EXCUSED ABSENCE from the Final Exam, and have taken the three midterm exams, may be eligible to receive a grade of "I" in the course. Incompletes will not be granted if a student has missed earlier exams, or is not passing based on the work up to the final. You need to fill out an incomplete request form (available in Smith 115) and have it signed. See me for details. This grade is

NOT routinely assigned! Any incomplete must be made up in the following semester. After that time all incompletes will turn into F grades.

Withdrawals
If you are considering withdrawing from the class for academic reasons, I urge you to come and speak with me. Your situation may not be as bad as you think it is. If you do decide to drop the class, you should officially withdraw from the course following the rules for your college and know that students withdrawing from the course will not have any records retained for use upon re-taking the class.

Help

Instructor
Asking questions during office hours is a first line of defense toward overcoming conceptual problems with the course material. Get help early on so that problems do not compound! I hope to see you in person so that I can help you if you are having any difficulty.

Free Tutoring
Room 124 Smith Hall is the site of regular Chem 1015 drop-in tutorial sessions conducted by general chemistry TAs. See schedule and more information at: http://genchem.chem.umn.edu/chem-10151017/tutor-room-schedule

Issues with your Instructor
On occasion you may have a concern or problem regarding this course. You will find your instructor quite willing to discuss this with you. If, however, you wish to discuss it with someone other than your instructor, please contact Dr. Lee Penn, the Chemistry Department Director of Undergraduate Studies. Their office is 225 Smith Hall and their phone number is 626-4680. You may also send e-mail to them at rleepenn@umn.edu. They will serve as a mediator in helping to resolve the issue.

Policy Statements

COVID-19, Face-Coverings, Symptoms, and Vaccination
The University of Minnesota currently requires all students, staff, and faculty to wear masks when indoors, regardless of vaccination status, and strongly encourages members of the campus community to get vaccinated. Resources are available for accessing vaccines.

Please stay at home if you are experiencing symptoms of COVID-19 and consult with your healthcare provider about an appropriate course of action. Please contact me right away so we can keep you on track in our course and keep all of your peers safe from exposure. All of our course materials are accessible through our Canvas site, so there is no reason to attend class if you may have COVID-19.

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 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.

Beware of websites (such as Chegg) that advertise themselves a "tutoring sites. It is not permissible to upload any instructor materials (such as videos, worksheets, hw assignments, exam questions)to these sites without their written permission. In addition, using these sites to complete homework or answer exam questions is consider academic dishonesty and will result in an F for the course.

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 dishonesty 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 in 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 violate 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 Harassment
The University policy on sexual harassment can be found at:
https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual_Harassment_Sexual_Assault_Stalking_Relationship_Violence.pdf

Equity, Diversity, and Equal Opportunity
We welcome 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
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 may have, a disability in any area such as mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC (612.626.1333, https://disability.umn.edu) 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.

If you are registered with the DRC and have a disability accommodation letter dated for this semester or year, please contact me as early in the semester as possible to review how the accommodations will be applied in the course.

Class Schedule

September

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3	4	5 Syllabus, Chpt 1	6 Chpt 1	7 Chpt 1	8 **Exam 0**	9 HW A
10	11 Chpt 2	12 Chpt 2	13 Chpt 2 HW B	14 Chpt 2	15 **Exam 1** **CH 1-2**	16
17	18 Chpt 3	19 Chpt 3	20 Chpt 3 HW C	21 Chpt 3	22 Chpt 4	23
24	25 Chpt 4	26 Chpt 4	27 Chpt 4 HW D	28 Chpt 4	29 **Exam 2** **CH 3-4**	30

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Chpt 5	3 Chpt 5	4 Chpt 5 HW E	5 Chpt 5	6 Chpt 6	7
8	9 Chpt 6	10 Chpt 6	11 Chpt 6 HW F	12 Chpt 6	13 **Exam 3** **CH 5-6**	14
15	16 Chpt 7	17 Chpt 7	18 Chpt 7 HW G	19 Chpt 7	20 Chpt 8	21
22	23 Chpt 8	24 Chpt 8	25 Chpt 8 HW H	26 Chpt 8	27 **Exam 4** **CH 7-8**	28
29	30 Chpt 9	31 Chpt 9	1 Chpt 9 HW I	2 Chpt 9	3 Chpt 10	4

November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30 Chpt 9	31 Chpt 9	1 Chpt 9 HW I	2 Chpt 9	3 Chpt 10	4
5	6 Chpt 10	7 Chpt 10	8 Chpt 10 HW J	9 Chpt 10	10 **Exam 5** **CH 9-10**	11
12	13 Chpt 11	14 Chpt 11	15 Chpt 11 HW K	16 Chpt 11	17 Chpt 12	18
19	20	21 HOLIDAY (no class)	22	23 HOLIDAY (no class)	24	25
26	27 Chpt 12	28 Chpt 12	29 Chpt 12 HW L	30 Chpt 12	1 **Exam 6** **CH 11-12**	2

December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27 Chpt 12	28 Chpt 12	29 Chpt 12 HW L	30 Chpt 12	1 **Exam 6 CH 11-12**	2
3	4 Review	5 Review	6 Review	7 Review	8 Review	9
10	11	12 NO CLASS	13 ALEKS Final Pie Due at 11:59PM	14	15 **FINAL EXAM START - 10AM**	16 **FINAL EXAM END - 10AM**

Suggested End of Chapter/Practice Problems

CHEM 1015

Week	Lecture Topic	Practice Problems-Burdge/Driessen 3rd Edition
1	Chapter 1	6, 9, 10, 12, 13, 15, 17, 21, 22, 23, 24, 25, 26, 27, 35, 37, 38, 44, 47, 49, 53, 55, 60
2	Chapter 2	4, 6, 8, 12, 20, 24, 25, 29, 39, 50, 52, 53, 56, 57, 60, 62, 65, 76, 94, 95, 97, 100, 104, 105, 108, 112
3	Chapter 3	1,2, 5, 6, 7, 9, 17, 19, 21, 23, 25, 27, 29, 31, 33, 37, 39, 43, 45, 49, 57, 59, 64, 66, 67, 71, 73, 75, 81, 84, 86, 89, 92, 95, 96, 97, 104
4	Chapter 4	1, 9, 10, 12, 14, 29, 31, 33, 35, 37, 41, 46, 47, 48, 61, 68, 69, 70
5	Chapter 5	5, 6, 7, 8, 9, 10, 11, 12, 16, 19, 20, 23, 24, 25, 26, 27, 28, 31, 38, 40, 42, 43, 44, 45, 50, 52, 62, 72, 73, 74, 75, 81, 82
6	Chapter 6	4, 6, 7, 8, 17, 18, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 46, 47, 50, 51, 52, 53, 57, 58, 59, 60, 61, 62, 63, 64, 66, 68
7	Chapter 7	8, 10, 11, 13, 21, 22, 23, 31, 34, 35, 36
8	Chapter 8	7, 8, 10, 27, 28, 32, 33, 35, 36, 39, 40, 44, 45, 46, 47, 48, 49, 55, 56, 58, 59
9	Chapter 9	3, 5, 7, 11, 14, 15, 18, 23, 25, 27, 29, 33, 39, 41, 43, 45, 47, 59, 61, 63, 67, 69, 75, 79
10	Chapter 10	1, 7, 9, 13, 15, 18, 19, 21, 23, 25, 27, 35, 37, 39, 41, 45, 47, 50, 51, 63, 65
11	Chapter 11	1, 3, 5, 7, 9, 11, 13, 15, 19, 21, 23, 27, 29, 31, 33, 35, 41, 43, 47, 49, 55, 61, 67, 73
12	Chapter 12	1, 9, 11, 13, 15, 21, 23, 25, 31, 33, 34, 35, 41, 43, 45, 49, 55, 57, 59, 61, 69, 71, 77, 79