Chemistry 1020: Interpretive Chemistry (4 credits)
Fall 2018 Course Syllabus

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Prerequisite (at least one of the following must apply)

- MATH 0240 with a grade of C or better
- ACT Math = 22+
- SAT Math Composite = 530+
- Adv Placement Calculus AB = 3+
- Adv Placement Calculus BC = 3+
- Accuplacer Elementary Algebra = 41+
- Accuplacer College Level Math = 50+
- Multi Measures move to 250/1100/1114 = 76+
- MCA Comprehensive Assessment Math = 1148+

Office Hours (held simultaneously in **S206 and online** unless otherwise specified)

- **Monday** 7:00-7:50 pm (online only)
- **Tuesday** 9:30-10:20 am; 1:00-1:50 pm
- **Thursday** 9:30-10:20 am; 1:00-1:50 pm
- Access via **Online Office Hours** link on the right-hand panel of this D2L Brightspace course
- Alternatively accessed directly at https://webmeeting.minnstate.edu/lund

Chemistry Lab Managers (CC = Cambridge Campus, CR = Coon Rapids Campus)

- **Lu Zhou**, CR S221, 763.422.6102, Lu.Zhou@AnokaRamsey.Edu
- **Ruth Pardini**, CR SC 160B & CR S221, 763.433.1212, Ruth.Pardini@AnokaRamsey.Edu
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Secretary

- **Dawn Hostrawser**, H243, 763.433.1246, Dawn.Hostrawser@AnokaRamsey.edu

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MATERIALS REQUIRED

- **Introductory Chemistry Textbook** (Choose **only one** option):

  1. **Introductory Chemistry**, (package custom-published for ARCC; content from **Introductory Chemistry**, 6th ed, Tro) Pearson Custom Library, **ISBN 978-13-23842-18-8**
     - Purchase through **ARCC Bookstore** for $132.25
     - **Includes** 18-month access to MasteringChemistry

  2. **MasteringChemistry with eText for Tro, Introductory Chemistry, 6e**
     - Purchase **access** through the link on your Chem 1020 course on D2L Brightspace (**Materials > Content > MasteringChemistry**) for $59.95
     - **Includes** 6-month access to **both** eText and MasteringChemistry
     - Free 14-day **temporary access** available, if waiting for financial aid

  3. **Introductory Chemistry**, 6th ed, Nivaldo Tro, **ISBN 0-134-30238-9** (purchase elsewhere)
     - **Separate purchase** of MasteringChemistry required (see **access option #3** below)

  4. **Introductory Chemistry**, 5th ed, Nivaldo Tro, **ISBN 0-321-91029-X** (purchase elsewhere)
     - **Separate purchase** of MasteringChemistry required (see **access option #3** below)

- **MasteringChemistry Access** (choose **only one** option):

  1. An **access code** is **included** with the purchase of **Textbook Option #1 above**. Access available through this option is valid for up to **18 months** and includes eText access. Register your access code within your Chem 1020 class on D2L Brightspace (**Materials > Content > MasteringChemistry**).

  2. Access to MasteringChemistry is **included** with the purchase of **Textbook Option #2 above**. Access purchased through this option is valid for up to **6 months**. Free 14-day **temporary access** available, if waiting for financial aid.

  3. **MasteringChemistry without eText for Tro, Introductory Chemistry, 6e**
     - For student that already have access a **used** textbook
     - Purchase **access** through the link on your Chem 1020 course on D2L Brightspace (**Materials > Content > MasteringChemistry**) for $43.00. Access valid for up to **6 months**.
     - Free 14-day **temporary access** available, if waiting for financial aid.

For illustrated instructions on accessing **MasteringChemistry and the eText** for the **first time**, go to https://bit.ly/2MPWOEv.

- **Scientific Calculator**
  - Smartphone, tablet, smartwatch, computer, or web apps may **not** be used on exams, nor may other aids be used.

- **Windows or macOS Computer with an Open USB Port**
  - While the majority of materials in this course may be accessed via mobile platforms, there are at least 5 labs in which computers are required to collect and analyze data.

Data collection will be done using a USB temperature probe found in your lab kit and installing data acquisition software delivered via D2L Brightspace. **This software is only compatible with Windows and macOS platforms. Chromebooks are not compatible.** Lab activities may **not** be completed in the ARCC computer labs. Mobile platforms are not recommended for D2L Brightspace, nor for MasteringChemistry.

- **Microsoft Word 2007 or above**
  - Whether you have your own licensed copy of Microsoft Office or not, you may take advantage of an annual subscription to Office 365, provided for **free** to all ARCC students. The subscription continues for one year after you graduate or leave college.
  - An Office 365 subscription includes access to **current versions** of *Word*, *Excel*, and *PowerPoint* for **both Windows** (*Office 2013* or *Office 2016*) and **macOS** (*Office 2016*) computers.
  - Office 365 also includes **1 TB** of **free online file storage** and a license to install mobile versions on your **iOS** or **Android** tablets and smartphones.
  - There is no need to install/use Office 365 **if you already have a licensed version** of Microsoft Office 2007 or above. However, macOS requires *Office 2016* for viewing mark-up on graded labs returned to the dropbox.
  - For more information or to get started with your **free Office 365** subscription, click here.

LAB MATERIALS REQUIRED

- **CHEM 1020 Online Lab Kit**: Purchase through the ARCC bookstore
- **Safety Glasses or Goggles**: Included in the CHEM 1020 Online Lab Kit
- **Additional Student-Provided Materials**: Listed in Lab H1 (available on D2L Brightspace)
- **Online Lab Activities & Manual**: Delivered via D2L Brightspace

ADDITIONAL RESOURCES

- **On-Campus Tutoring:** Link to schedule posted at http://webs.anokaramsey.edu/lund, through D2L Brightspace, and at the Academic Support Center on each campus.
- **Online Tutoring:** Click the **Tutoring.com** widget on the right-hand panel within this D2L Brightspace course. ARCC students are provided with 15 hours of free access per academic year. 24/7 access is available 361 days a year.

COURSE OUTCOMES

Upon completion of the course, the student should be able to:

- understand and explain basic principles of chemistry using chemical vocabulary.
- name and write chemical formulas for simple compounds.
- complete and balance chemical equations.
- set up and solve elementary chemical problems.
- perform basic laboratory procedures.
- correlate lecture topics with laboratory procedures and practical applications.

LABORATORY

Completion of laboratory activities is mandatory and must be completed by the assigned due dates and times. A list of **laboratory activities** is found under the **Materials > Content** menu of this course in D2L Brightspace. **Due dates** have been set to **11:59 pm** on the indicated due date.

Lab Activity H1 must be completed with a minimum score of 80% or higher before the remaining lab activities are visible, since it involves an introduction to safety procedures and the online laboratory kit. Beginning with Lab Activity H2, **you must view a prelab video** specific to that lab activity and **pass a prelab quiz** with a **minimum score of 2/3** to gain access to the lab report and dropbox for that lab activity.

You are **initially** provided with **up to three attempts** for each prelab quiz. You may use all three attempts to better your score, even if you passed the prelab quiz on an earlier attempt. If you do **not** pass the prelab quiz in three attempts, a 2nd Chance prelab quiz with three additional attempts will become available in D2L Brightspace. If you do not pass either the initial prelab quiz or 2nd Chance prelab quiz with a minimum score of 2/3 in six aggregate attempts, you will not be able to complete the given lab activity. In all cases, the **last attempt** of the **initial** prelab quiz is recorded into the gradebook, even if it is not the highest score of all attempts.

If you fail to complete a lab activity, it will count as a ZERO. However, the lowest laboratory score for the semester will be dropped, as will the lowest prelab quiz score. Lab Activity H1 may not be dropped because of the introduction and safety requirement. Also, **you will be granted one extension** on lab activities during the semester up to a maximum of one week with no penalty. Additional extensions for lab activities will be subject to a 10% deduction per day late for up to a maximum of one week. **Labs completed more than one week late will receive no credit.**

Since this is a laboratory-based course, **students missing three labs will have their grade for the course reduced by one full letter grade**. **Students missing four labs will have their grade reduced by two full letter grades**. **Students missing five or more labs will fail and be dropped from the course**. A laboratory course should involve as much "hands-on" work as possible for each student.

While one lab score will be dropped in the final grade, a missing lab activity is a missing lab activity. In other words, if you fail to complete five lab activities, it will count as missing five lab activities even though the lab score for one lab activity will be dropped at the end of the semester. For students taking this course pass/fail, the threshold for passing the course is a C-equivalent final grade or above. Therefore, a student with a C-equivalent grade that is missing **three missing labs** will fail the course.

ASSIGNMENTS AND QUIZZES

A complete list of **assignments** may be found under the **Materials > Content** heading of this course on D2L Brightspace. Several sections of your text will also be accompanied by specific topic videos, ✓QuickCheck worksheets, and ✓QuickCheck solution videos that have been prepared by the professor. It is very helpful if these items are completed prior to attempting the **end-of-chapter suggested problems** and **MasteringChemistry** homework quizzes assigned for each chapter. Students should take the initiative to keep up with their work to prepare themselves for quizzes and exams. See the section in the syllabus entitled **More Information on Assignments** below for additional details.

There will be **two D2L Brightspace quizzes** during the semester. One quiz will be on the syllabus and introductory materials and the other will be on selected elements and chemical symbols from the Periodic Table. D2L Brightspace quizzes will be worth 10 points each, with availability and due dates shown on the course calendar. Extensions for quizzes may be granted at the discretion of the professor. Extensions on D2L Brightspace quizzes, if granted, are subject to a 50% penalty.

MasteringChemistry homework quizzes will be assigned for each chapter. The quizzes are graded electronically and are worth 5 points each. MasteringChemistry homework quizzes include several even-numbered problems taken directly from your text. There is a 1% deduction for each hour a question on a homework quiz is submitted late (the entire quiz is not penalized!), for up to 100 hours (96 hours = 4 days). Your lowest MasteringChemistry homework quiz score of the semester will be dropped.

Due dates are set at regular intervals throughout the course in proportion to the amount of time necessary to complete each chapter. MasteringChemistry homework quizzes are due at 11:59 pm of the due date – see the course calendar on **p. 13** for details. For instructions on accessing MasteringChemistry, see **p. 2** of the course syllabus.

MORE INFORMATION ON ASSIGNMENTS

Once you login to D2L Brightspace, you will be able to see all of the **assignments for the semester** under the under the **Materials > Content** heading of **this D2L Brightspace course**. The assignments are organized by exam and by chapter. For students that would like to get an early start, the outline for Chapter 2 is given below.

Chapter 2: Measurement and Problem Solving

- **Read 2.1: Measuring Global Temperatures**
- **Read 2.2: Scientific Notation**
  - Introduction to Scientific Notation Video (available on D2L Brightspace only)
  - QuickCheck - Scientific Notation (click on link)
  - QuickCheck - Scientific Notation Video (available on D2L Brightspace only)
  - QuickCheck - Scientific Notation Solution (available on D2L Brightspace only)

- **Read 2.3-2.4: Significant Figures, Significant Figures in Calculations**
  - Introduction to Significant Figures Video (available on D2L Brightspace only)
  - QuickCheck - Significant Figures (click on link)
  - QuickCheck - Significant Figures Video (available on D2L Brightspace only)
  - QuickCheck - Significant Figures Solution (available on D2L Brightspace only)
- **Read 2.5: Basic Units of Measurement**
  - Memorize these SI Prefix Multipliers
- **Read 2.6-2.8: Conversions & Dimensional Analysis**
  - Introduction to Dimensional Analysis Video (available on D2L Brightspace only)
  - QuickCheck - Dimensional Analysis (click on link)
  - QuickCheck - Dimensional Analysis Video (available on D2L Brightspace only)
  - QuickCheck - Dimensional Analysis Solution (available on D2L Brightspace only)
- **Read 2.10: Density**
  - Introduction to Density Video (available on D2L Brightspace only)
  - QuickCheck - Density (click on link)
  - QuickCheck - Density Video (available on D2L Brightspace only)
  - QuickCheck - Density Solution (available on D2L Brightspace only)
- **Read 2.11: Problem-Solving Strategies**
- **Chapter 2 End-of-Chapter Suggested Problems***
  - #7, 11, 27, 31, 39, 41, 43, 49, 55, 57, 61, 69, 73, 75, 79, 95, 99, 101, 109, 111, 113
  - Also available on MasteringChemistry (Chapter 2 Practice Sets A & B)
- **Chapter 2 MasteringChemistry Homework Quiz**
  - Available on MasteringChemistry (accessed within D2L Brightspace)

*The **End-of-Chapter Suggested Problems** should be considered the **minimum number of problems** that should be completed in your studies. Additional practice should make you more proficient with course material. **The outlines for Chapters 3-14 and 18 are found under the Materials > Content heading of the D2L Brightspace course.**

The **end-of-chapter suggested problems** are also found in MasteringChemistry as practice problem sets that may be completed for **extra credit** (see p. 10). Along with the reading assignments and other course content provided on D2L Brightspace these problems should provide you with a broader view of what to expect on your one-hour and final exams.

Additionally, you will be assigned **graded homework quizzes** taken primarily from the text through MasteringChemistry (access within D2L Brightspace). Due dates are posted to MasteringChemistry and on the course calendar on **p. 13**. The MasteringChemistry homework quizzes give a narrower view of what to expect on your one-hour and final exams, i.e. they are intended to be quizzes.

TEXTBOOK SUMMARY - READING AND PRACTICE PROBLEMS

Note: The End-of-Chapter Suggested Problems listed below are considered the **minimum** number of problems that should be completed in your studies. Additional practice should make you more proficient with the course material. Additionally, you will be assigned graded homework problems taken from the text through MasteringChemistry.

Exam	Chap	Title	Sections Covered	*End-of-Chapter Suggested Problems
1	1	*The Chemical World*	All sections	None
	2	*Measurement and Problem Solving*	Sections 2.1-2.8, 2.10-2.11	#7, 11, 27, 31, 39, 41, 43, 49, 55, 57, 61, 69, 73, 75, 79, 95, 97, 99, 103, 105, 115, 117
	3	*Matter and Energy*	Sections 3.1-3.10	#3, 7, 11, 13, 15, 29, 35, 39, 45, 73, 113, 115
	4	*Atoms and Elements*	All sections	#3, 11, 13, 17, 19, 25, 27, 33, 49, 53, 55, 57, 61, 71, 75, 85, 89, 91, 101, 107, 109, 119
2	5	*Molecules and Compounds*	Sections 5.1-5.10	#1, 9, 11, 15, 21, 23, 29, 31, 43, 47, 51, 53, 59, 61, 63, 65abcde, 69abcdf, 71, 73, 77, 81, 95abcd (Note: additional problems provided on D2L Brightspace)
	6	*Chemical Composition*	Section 5.11 Sections 6.1-6.7	**Chap 5:** #83, 101 **Chap 6:** #21, 31, 37, 45, 49, 63, 73, 85, 105, 109
	7	*Chemical Reactions*	Sections 7.1-7.6, 7.9 (combustion only), 7.10	#5, 7, 11, 15, 25, 29, 35, 37, 41, 47, 51, 53, 55, 57, 59, 63, 65, 67, 85, 87
3	8	*Quantities in Chemical Reactions*	Sections 8.1-8.6	#2, 3, 7, 9, 17, 21, 27, 35, 45, 49, 53, 57, 61, 63, 79, 85
	11	*Gases*	Sections 11.1-11.6	#1, 2, 5, 9, 11, 25, 33, 35, 39, 41, 51, 53
	9	*Electrons in Atoms and the Periodic Table*	Sections 9.1-9.6, 9.7 (valence electrons only); Section 10.2	#3, 5, 9, 13, 14, 15, 16, 61
	10	*Chemical Bonding*	Sections 10.1-10.5	#5, 7, 9, 25, 27, 29, 33, 37, 39, 43, 47, 49ac, 51, 53, 95, 99 (Note: Expt. 5, conducted in lab, will also help.)
4	18	*Organic Chemistry*	Sections 18.1-18.8, 18.11-18.15	#1, 7, 9, 13, 21, 23, 25, 27, 33, 35, 37, 39, 43, 45, 47, 49, 53, 57a, 59ab, 83, 85bcd, 87a, 91, 93, 95, 103, 107 (Note: additional problems provided on D2L Brightspace)
	12	*Liquids, Solids, and Intermolecular Forces*	Sections 10.7-10.8; Sections 12.1-12.2, 12.4-12.8	Chap **10**: #17, 77, 83, 89acd, 97 Chap **12**: #1, 5, 9, 13, 16, 23, 25, 33, 41, 47, 63, 65, 75, 77, 81, 105
	13	*Solutions*	All sections (no calculations for Section 13.9)	#3, 5, 6, 7, 8, 11, 14, 17, 20, 23, 31, 33, 35, 43, 47, 61, 63, 71, 73, 81, 83, 85, 87, 131 (Note: additional problems provided on D2L Brightspace)
Final	14	*Acids and Bases*	Sections 14.1-14.4, 14.5 (skim), 14.7, 14.8 (no calculations), 14.9	#1, 2, 5, 7, 8, 17, 20, 21, 24, 29, 53, 57acd, 67, 69, 73, 77, 103
	The Final Exam is cumulative, so a review of all course material is appropriate.			

***The End-of-Chapter Suggested Problems are also found on MasteringChemistry as practice problem sets for extra credit** (see p. 10). These problems will give you a broader view of what to expect on the one-hour and final exams, as will the reading assignments and other course content provided on D2L Brightspace. The Mastering Chemistry homework quizzes give a narrower view of what to expect on your one-hour and final exams – they are intended to be quizzes.

EXAMS

There will be four one-hour exams plus the final exam. Only those topics covered in the reading assignments, D2L Brightspace topic videos, ✓QuickCheck worksheets, ✓QuickCheck solution videos, suggested end-of-chapter problems, and MasteringChemistry homework quizzes will appear on the exams. **Each one-hour exam (exams 1, 2, 3, and 4)** will be available for a **54-hour window** on the dates specified on the calendar included in this syllabus (p. 13). Access to each **one-hour exam** begins at **6:00 pm two evenings previous** to each listed **exam date deadline** and **must be completed** by **11:59 pm** of the **exam date deadline.** Each **one-hour exam** has a **60-minute time limit** and is administered on D2L Brightspace**.**

There will be NO late make-ups for the one-hour exams. **Exams missed for any reason will count as a ZERO.** However, your lowest one-hour exam score of the semester will be dropped. Since you never know when unplanned events may prevent you from taking a future exam, you should try your very best on every exam. **You may request early access** to the **one-hour exams**, in advance as far as you wish (please provide a 72-hour advance notice). However, **exam results will not be discussed, answer keys will not be posted,** and **grades will not be updated** in the D2L Brightspace gradebook until **one hour after the exam deadline** has passed for **all students**.

The Final Exam is a proctored exam and will be administered on the Coon Rapids Campus at **10:00 am on Saturday, December 15, 2018**. The final exam has a **two-hour time limit**. A **photo I.D. is required**. Alternative arrangements for taking the Final Exam in the Testing Center on either campus or other **certified proctoring center** of your choice may be made by consulting with the professor no later than **Wednesday, November 28**. Students making **alternative arrangements** may take the final exam **as early as Monday, December 10,** and **no later than Tuesday, December 18.**

A **certified proctoring center** is one in which exam proctoring is a primary component of their operations. The proctor **must have one or more** of the following capabilities in place:

- Browser lockdown software
- Screen monitoring software
- Security cameras
- Direct sightlines to the computer screen

In addition, exam supervision **must be** from **start-to-finish**. While many public libraries offer proctoring services (for a fee or free), they do not provide the level of security and supervision found in a certified proctoring center expected by the professor for a final exam. Most (not all) Minnesota State institutions have dedicated testing centers in place and the majority of these will proctor students taking online classes at other Minnesota State institutions for free. In the event you are taking online courses elsewhere, it may be helpful to know that both campuses of ARCC offer free exam proctoring for students taking online classes at other Minnesota State institutions.

The National College Testing Association also has over 300 certified testing centers throughout the United States and Canada, each of which charge a small fee for exam proctoring. You may find these locations at http://www.ncta-testing.org/find-a-cctc-participant.

Finally, the Chem 1020 Final Exam has a well-established history. Historically, the class average on the Final Exam is either the highest or second highest average exam score of the semester. Therefore, if you score significantly lower on the final exam than on the one-hour exams, it will call into question the scores earned on all previous exams in the course. **Students that score more than 10% lower than their lowest one-hour exam score and/or more than 20% lower than their one-hour exam score average may be required to retake one or more of their one-hour exams in the presence of a proctor**.

ACCOMMODATIONS FOR STUDENTS WITH DOCUMENTED DISABILITIES

Students requiring accommodation for a disability must make an appointment during the first week of class to meet with the professor to ensure the accommodations may be made. Disabilities must be documented through the Office of Disability Services at 763.433.1350.

ALTERNATIVE TESTING

Alternative testing is handled through the Campus Testing Center at 763.433.1314. Alternative testing is only available to those students that have met the conditions in the previous section on Accommodations.

Alternative exams must be scheduled during the same time window **or before** the time window scheduled for the rest of the class. On occasions where this is impossible, please consult with the professor **before** scheduling an exam time with the Testing Center. The professor and student will try to work out some other arrangement.

The Testing Center will provide you with an appointment slip to pass along to your professor, indicating the date and time of the alternative exam. In order to take the exam in the Testing Center, the professor must receive the appointment slip at least three class days (72 hours) **before** you intend to take the exam. If the professor does not receive the slip at least three class days (72 hours) in advance, you will not be able to take the alternate exam. However, you are welcome to take the exam during the regularly scheduled time window on D2L Brightspace.

Students arranging alternative exams are subject to the same make-up policy as the rest of the class, meaning that you must take the exam before the end of the available time window. Students that do not take the exam before the end of the available time window will receive a **zero** on the exam. **No exceptions**.

EXTRA CREDIT

You may be allowed to earn a **maximum of 10 points extra credit**. Only those opportunities described below will be considered for extra credit.

0.3 extra credit points. Awarded for each **practice** problem set completed in MasteringChemistry with a score of 80% or above. Practice problem sets must be completed **by 11:57** or **11:58 pm** of the indicated due date to receive full credit (see the course calendar on **p. 13**). There is a 1% deduction for each hour a question in the practice problems is submitted late (the entire problem set is not penalized!), for up to 100 hours (96 hours = 4 days).

0.3 extra credit points. Awarded to the **first** person that identifies each of these types of errors in the D2L Brightspace portion of this course, in the textbook, or on MasteringChemistry:

- typo
- spelling
- grammatical – affecting interpretation, like missing word(s)
- wrong answers on assignments, quizzes, exams, etc.
- discussion boards, emails, other informal writing excluded

2 extra credit points. Awarded for an extra credit lab opportunity that will be announced in D2L Brightspace near the end of the semester. It must be completed by the announced due date.

Awarding of extra credit points is at the discretion of the professor. Extra credit is intended for students that have completed all of the other work in the course. **Extra credit may not be added into the gradebook until the end of the semester.**

PARTICIPATION, DISCUSSION BOARDS, AND EMAIL

A maximum of 20 points will be awarded over the course of the semester through your **Online Participation** in various course activities.

- **View materials posted under the Materials > Content menu of this D2L Brightspace course.**
  - Your score will be based on the percentage of items viewed out of 80% of the available items to that point in the course.
  - This category will account for 10 of the 20 participation points in the course.
  - Example: If there were 200 items available through Exam 2 in the course, 80% of this amount is 160 items. If 120 of these items were viewed, this is 75% of 160 and you would receive 75% of the points available for this category or 7.5 points.

- **Read posts under the Communications > Discussions menu of this D2L Brightspace course** to remain informed.
  - Your score will be based on the percentage of posts viewed out of 80% of the posts made to that point in the course.
  - This category will account for 5 of the 20 participation points in the course.
  - Example: If there were 300 posts made through Exam 3 in the course, 80% of this amount is 240 posts. If 216 of these posts were viewed, this is 90% of 240 and you would receive 90% of the points available for this category or 4.5 points.

- **Post to the D2L Brightspace discussion boards or participate in online office hours.**

  - Examples of qualifying posts:
    - providing tips on learning strategies or completing lab activities
    - posting questions on problem assignments or lab activities (do **not** post questions about Mastering Chemistry homework quizzes)
    - **correctly** answering questions posted by your peers
    - sharing recent chemistry in the news (avoid religious or political issues)
  - A simple post such as “thank you”, “I agree” is not a qualifying post. In order to qualify, it should require some thought or effort.
  - 1 point will be awarded for each qualifying post made and 1 point will be awarded for each time you participate in online office hours.
  - This category is capped at 5 points and will account for 5 of the 20 participation points in the course. Furthermore, **a minimum of 1 point must be earned by posting to the discussion boards** and a **minimum of 1 point must be earned by visiting the online office hours**.

When should I send the professor an email and when should I post to the discussion boards?
The **discussion boards are preferred for most forms of communication and inquiry** in this course. You may not realize it, but if you have a question about something in the course, there are likely several others that have the same question but just haven't asked. Most content questions fall into this category. It is requested that discussion board postings are written in a manner that avoids inflaming issues you may be experiencing.

Please reserve email for issues that require private communication between the professor and student. Examples of this might be grades, death in the family, a problem you have with a classmate or the professor, or issues that may be inflammatory if posted to the discussion boards. In many cases, your peers can reply to you faster on the discussion boards than the professor will be able to reply by email. **Emails sent to the professor must be from your ARCC-assigned email account to confirm your identity. Private data will not be shared with unverified email accounts.**

CONDUCT

I believe in conducting my course with mutual respect amongst all of us. In particular for online classes, I request that you bring any issues related to the course to the professor's attention in a manner that avoids inflaming the issue any further. Inflamed issues are very often the result of misunderstanding.

Students are responsible for all information and assignments given in the course. Skipping assignments and/or waiting until the last minute to complete assignments usually results in poor or failing grades. Please contact the professor in advance if you know you will have an extended absence from access to course materials.

Problem students may be removed from the course and may not return until meeting with the Dean of Student Life and meeting the guidelines set forth in the Student Conduct Code.

CHEMISTRY 1020 ONLINE LECTURE, LAB, and EXAM SCHEDULE

Lecture	Lab	Monday	Tuesday	Wednesday	Thursday	Friday
Intro, Ch 1, 2	H1	Aug 27	Aug 28	Aug 29	Aug 30	Aug 31
Ch 2, 3	H2	Sep 3 No School Labor Day	Sep 4 Practice 2A Due Syllabus Quiz Due	Sep 5 Lab H1 Due	Sep 6 Practice 2B Due	Sep 7 MC Quiz 2 Due
Ch 3, 4	H3	Sep 10 Lab H2 Due	Sep 11 Practice 3A Due	Sep 12 Practice 3B Due	Sep 13 MC 3 Quiz Due	Sep 14
Ch 4, 5	H4	Sep 17 Practice 4A Due Lab H3 Due	Sep 18 Element Quiz Due	Sep 19 Practice 4B Due MC 4 Quiz Due	Sep 20 Exam 1** (Ch 2-4)	Sep 21
Ch 5, 6	H5	Sep 24 Lab H4 Due	Sep 25 Practice 5A Due	Sep 26	Sep 27 Practice 5B Due	Sep 28 MC Quiz 5 Due
Ch 6, 7	H10	Oct 1 Lab H5 Due	Oct 2 Practice 6A Due	Oct 3	Oct 4 Practice 6B Due	Oct 5 MC Quiz 6 Due
Ch 7, 8	H11	Oct 8 Lab H10 Due	Oct 9 Practice 7A Due	Oct 10	Oct 11 Practice 7B Due MC Quiz 7 Due	Oct 12 Exam 2** (Ch 5-7)
Ch 8, 11	H12	Oct 15 Lab H11 Due	Oct 16 Practice 8A Due	Oct 17	Oct 18 No School Fall Break	Oct 19 No School Fall Break
Ch 11, 9	***	Oct 22 Practice 8B Due	Oct 23 MC Quiz 8 Due	Oct 24	Oct 25 Practice 11 Due	Oct 26
Ch 10	H6	Oct 29 Lab H12 Due	Oct 30 Practice 9 Due MC Quiz 11/9 Due	Oct 31	Nov 1 Practice 10A Due	Nov 2
Ch 10, 18	H17	Nov 5 Lab H6 Due	Nov 6 Practice 10B Due MC 10 Quiz Due	Nov 7 Exam 3** (Ch 8-11)	Nov 8	Nov 9
Ch 18	H20	Nov 12 No School Veterans Day	Nov 13 Practice 18A Due Lab H17 Due	Nov 14	Nov 15 Practice 18B Due	Nov 16 MC 18 Quiz Due
Ch 12	H13	Nov 19 Lab H20 Due	Nov 20 Practice 12A Due	Nov 21	Nov 22 No School Thanksgiving	Nov 23 No School Thanksgiving
Ch 13	***	Nov 26 Practice 12B Due	Nov 27 MC 12 Quiz Due	Nov 28 Last Day to Withdraw	Nov 29	Nov 30 Practice 13A Due
Ch 14	H14	Dec 3 Lab H13 Due	Dec 4 Practice 13B Due MC 13 Quiz Due	Dec 5 Exam 4** (Ch 18, 12-13)	Dec 6	Dec 7
Ch 14, Review	H25	Dec 10 *Early Final* Lab H14 Due	Dec 11 *Early Final* Practice 14A Due	Dec 12 *Early Final*	Dec 13 *Early Final* Practice 14B Due	Dec 14 *Early Final* MC 14 Quiz Due
		Dec 17 *Late Final*	Dec 18 *Late Final*	Dec 19	Dec 20	Dec 21

* The **proctored Final Exam** is scheduled for **Saturday**, **December 15, 2018** at **10:00 am** on the **Coon Rapids campus**. Alternative arrangements may be made at the Testing Center on either campus or with a **certified proctoring center**. See **p. 8** for more information.

** **Early access** to the **one-hour exams** may be requested as far in advance as you wish (please provide 72-hour advance notice). See **p. 8** for more information.

KEEPING TRACK OF YOUR PROGRESS IN THIS COURSE

You may use the table below to keep track of your scores. To determine where you stand in the course, divide the total of your points earned by the total number of points possible. Then multiply by 100. This will give you a percentage, which you can use to determine your letter grade.

Item	Points Earned	Points Possible		Item	Points Earned	Points Possible
PreLab H2		3		Syllabus Quiz		10
PreLab H3		3		Element Quiz		10
PreLab H4		3				
PreLab H5		3		MC 2		5
PreLab H10		3		MC 3		5
PreLab H11		3		MC 4		5
PreLab H12		3		MC 5		5
PreLab H6		3		MC 6		5
PreLab H17		3		MC 7		5
PreLab H20		3		MC 8		5
PreLab H13		3		MC 11/9		5
PreLab H14		3		MC 10		5
				MC 18		5
Lab H1		10		MC 12		5
Lab H2		10		MC 13		5
Lab H3		10		MC 14		5
Lab H4		10				
Lab H5		10		Participation		20
Lab H10		10		Extra Credit		0
Lab H11		10				
Lab H12		10		Exam 1		100
Lab H6		10		Exam 2		100
Lab H17		10		Exam 3		100
Lab H20		10		Exam 4		100
Lab H13		10				
Lab H14		10		Final Exam		200
Totals		153*		**Totals**		600*
Grand Total		753*				

***Please Note:**

- Lowest one-hour exam score will be dropped.
- Lowest prelab quiz score will be dropped.
- Lowest lab score will be dropped (Lab H1 excluded).
- Lowest MC score will be dropped.

GRADES

Your final grade will be based on a total point system using the following letter grades:

A 90.0 % and above
B 80.0 - 89.9 %
C 70.0 - 79.9 %
D 60.0 - 69.9 %
F below 60.0 %

If you registered for the course Pass/Fail:

P 70.0% and above
F below 70.0%

Here is the breakdown of points, by category:

1.	Laboratory (Including Prelab Quizzes)	**153**	**points**
2.	Quizzes/MasteringChemistry/Participation	**100**	**points**
3.	Three highest one-hour exam scores	**300**	**points**
4.	Final Exam	**200**	**points**
	Total	**753**	**points**

ACADEMIC HONESTY

It is expected that all of your work in this course is completed in an honest manner. Rules of student conduct are outlined in the Student Handbook and on the college website. Cheating is a serious issue. It includes use of unauthorized materials or resources during exams or assignments and will result in a score of zero for the exam or assignment in question. Cheating may also result in a failing grade in the course and referral to the Dean of Student Life.

SUCCEEDING IN THIS COURSE

One of the questions I am often asked by current and prospective students: **What does it take to succeed in this course?** The last page of this syllabus gives you some idea of the amount of **study time** you should expect, but I usually find it difficult to come up with the magical answer that students are looking for, since everyone is different. There are different work ethics, natural abilities, work schedules, maturity levels, personal issues, and family lives. This said, there are a few typical profiles of students that I have found:

Students Receiving a Grade of "D" or "F" or Withdrawing from the Course:

- Uses very little of the provided D2L Brightspace Content (✓QuickChecks, Videos, Worksheets)
- Missing Lab Activities or waits until the last minute to start the Lab Activities (so questions cannot be answered before the deadline)
- Missing or late MasteringChemistry Homework Quizzes
- Does not do the Reading Assignments
- Does not do the Suggested Problem Assignments
- Does not read or post to the D2L Brightspace Discussion Boards
- Never attends Online Office Hours

Students Passing the Course, but Dissatisfied with Their Grade:

- Uses some of the provided D2L Brightspace Content (✓QuickChecks, Videos, Worksheets)
- Waits until the last minute to start the Lab Activities (so questions cannot be answered before the deadline)
- Waits until the last minute to do the MasteringChemistry Homework Quizzes
- Does some of the Reading Assignments
- Does some of the Suggested Problem Assignments
- Occasionally reads or posts to the D2L Brightspace Discussion Boards
- Never or rarely attends online office hours

Students Passing the Course AND Satisfied with Their Grade:

- Uses all of the provided D2L Brightspace Content (✓QuickChecks, Videos, Worksheets)
- Starts and/or completes the Lab Activities early (so there is adequate time to address questions)
- Does all of the Reading Assignments
- Does all of the Suggested Problem Assignments **and more** for practice
- Starts and/or completes MasteringChemistry Homework Quizzes early
- Reads all of and posts frequently to the D2L Brightspace Discussion Boards
- Often attends online office hours

As a reminder, these are typical profiles. There are always exceptions. In general, the more time you put into the course, the better you will do. The less time you put in, the poorer you will do. As I often told my own sons:

"Homework is when you only do what is required of you. Studying goes above and beyond homework. It is what you do to master the material. **You will likely find yourself disappointed in the end if you have only done the homework.**"

When I first started teaching at the college level, I was mentored by a well-seasoned colleague of mine that conveyed this message to students in his classes:

"It is very important that you *discipline* yourself to become an organized, conscientious student who studies regularly (daily). Last-minute cramming for cumulative exams usually results in poorer understanding of concepts and lower exam scores. **You should view difficulty as a challenge to overcome and mediocrity as unacceptable.**"

STUDYING

Another question I often hear from both my seated and online students: **How much time should I set aside for this course?**

For a seated course, the general guidelines suggest that for each hour spent in lecture, you should spend two hours outside of class. More difficult classes such as those in math and science or those requiring more independent work may require three hours outside of class for each hour spent in lecture. Also, for each two-hour lab such as the one attached to this course, there should be one additional hour spent outside of lab.

With this in mind, the table below shows how much time I spend with my seated students on each chapter and the online course time total equivalents.

Chapter	Time in Class	Time Outside of Class	Online Course Equivalent Time
Intro	1 hour	2 to 3 hours	3 to 4 hours
2	4.5 hours	9 to 13.5 hours	13.5 to 18 hours
3	2 hours	4 to 6 hours	6 to 8 hours
4	3 hours	6 to 9 hours	9 to 12 hours
5	3 hours	6 to 9 hours	9 to 12 hours
6	1.5 hours	3 to 4.5 hours	4.5 to 6 hours
7	3 hours	6 to 9 hours	9 to 12 hours
8	3 hours	6 to 9 hours	9 to 12 hours
11/9	3 hours	6 to 9 hours	9 to 12 hours
10	3 hours	6 to 9 hours	9 to 12 hours
18	4.5 hours	9 to 13.5 hours	13.5 to 18 hours
12	3 hours	6 to 9 hours	9 to 12 hours
13	3 hours	6 to 9 hours	9 to 12 hours
14	3 hours	6 to 9 hours	9 to 12 hours
Review	1.5 hours	3 to 4.5 hours	4.5 to 6 hours
		Total Time Spent on Lecture Material =	**126 to 168 hours**

Lab	Time in Lab	Time Outside of Class	Online Course Equivalent Time
H1	2 hours	1 hour	3 hours
H2	2 hours	1 hour	3 hours
H3	2 hours	1 hour	3 hours
H4	2 hours	1 hour	3 hours
H5	2 hours	1 hour	3 hours
H10	2 hours	1 hour	3 hours
H11	2 hours	1 hour	3 hours
H12	2 hours	1 hour	3 hours
H6	2 hours	1 hour	3 hours
H17	2 hours	1 hour	3 hours
H18	2 hours	1 hour	3 hours
H13	2 hours	1 hour	3 hours
H14	2 hours	1 hour	3 hours
Cleanup	2 hours	-	2 hours
		Total Time Spent on Lab Material =	**41 hours**

Total Course Time Commitment (Lecture and Lab) =	**167 to 209 hours**

This yields an **average time commitment of *11 to 14 hours per week* for this course**.