Course Instructors

Amy Strathman
she/her
Campus Address: W333 CB
Phone: (319) 335-1108
Email: CHEM-1070@uiowa.edu
Drop-in Office Hours: T: 10:30AM-11:30 AM (in W323 CB); W: 2:30PM-3:30PM (in W323 CB); Th: 1:30PM-2:30PM (in W244 CB) or by appointment

Mouna Maalouf
Campus Address: W337 CB
Phone: (319) 335-4832
Email: CHEM-1070@uiowa.edu
Drop-in Office Hours: Th: 11:00AM-12:00PM (in W337 CB) or by appointment

Michael Sinnwell
Campus Address: E323 CB
Phone: (319) 335-4832
Email: CHEM-1070@uiowa.edu
Drop-in Office Hours: T: 9:30-10:30am (in W323 CB) or by appointment

Department

Department of Chemistry
DEO: Leonard R. MacGillivray
Phone: (319) 335-1350
Email: len-macgillivray@uiowa.edu

All times for the course will take place in Central Time.

The University of Iowa encourages students, faculty, and staff to be vaccinated and boosted against COVID-19. The university also welcomes students, faculty, and staff to wear a face mask while on campus, in classroom settings, and during in-person office hours. However, face mask usage is not required except in specified healthcare settings.

Course Description and Goal

CHEM:1070 provides a general introduction to chemistry and is appropriate for students who have not had an advanced chemistry course in high school. Students will learn how scientific knowledge is acquired, applied, and communicated, as they master many of the key concepts central to the science of chemistry. Students are expected to consistently work throughout the semester on developing relevant chemical content knowledge, critical thinking abilities, and problem-solving skills through active learning in and outside the classroom.

The goals of this course are as follows:

- Mastery of major concepts and theoretical principles in chemistry
- An understanding of the relationship between the microscopic, macroscopic, and symbolic descriptions of matter and the changes it undergoes
- Provide opportunities to develop critical thinking and problem-solving skills

This course is approved as part of the General Education Program (GEP) in the College of Liberal Arts and Sciences (CLAS) and can be used to fulfill part of the requirement in the Natural Sciences category.

This course will cover the following topics: measurement and units, matter and energy, stoichiometry and chemical equations, thermochemistry, electronic structure of atoms, periodic trends, molecular bonding and structure, properties of gases, intermolecular forces, solution chemistry, equilibrium, oxidation-reduction reactions, acids and bases, and nuclear chemistry.
Requirement: proficiency with elementary algebra

Course Learning Objectives

At the end of this course, successful students will be able to:

- Demonstrate basic understanding of the structure and properties of chemical systems using the tools of the discipline including models, data analysis, and the use of symbolic representations.
- Gain experience in the practices of scientific investigation including observation, logic, analysis, objectivity, precision, and clear communication.

Course Delivery

CHEM:1070 consists of three scheduled components (lecture, discussion, and exams) with all components meeting in person. Attendance is expected in all components of the course. You should also expect to devote at least six hours per week to out-of-class homework, quizzes, and studying for this course (3 credits x 2 hours out-of-class time per credit). The course components will operate with the following formats:

In-person Lectures
- **Instructors:** Profs. Maalouf, Sinnwell, and Strathman
- **Time:** Mondays, Wednesdays, and Fridays at 9:30 AM, 10:30 AM, or 1:30 PM
- **Delivery Format:** Lectures will meet in-person at the scheduled lecture times in a university classroom. Lecture will utilize large-class discussion of material as well as small-group active engagement with peer learning assistants (LAs). See the Lecture Participation section for more details.

In-person Discussion Sections
- **Instructors:** graduate teaching assistants (TAs) overseen by Profs. Maalouf, Sinnwell, and Strathman
- **Time:** weekly enrolled section
- **Delivery Format:** will meet face-to-face weekly in your assigned classroom listed on your MyUI schedule

In-person Exams
- **Instructors:** Profs. Maalouf, Sinnwell, and Strathman along with proctors
- **Time:** see dates/times in Exam Section
- **Delivery Format:** administered in person in a university classroom (assignments to rooms will be posted in ICON and announced in class)

Media/System Requirements

For the best learning experience, the following is required:

- **Student-provided personal computer.** While tablets, smartphones, and other mobile devices may allow for some completion of coursework, they are not guaranteed to work in all areas. It is recommended that you have access to a Windows or Mac based computer to complete coursework in the event your selected mobile device does not meet the needs of the course.
- **Computer with reliable Internet access.** A wired Ethernet connection to the internet is very strongly suggested. Wireless and cellphone data connections may experience connection problems. Android and iOS operating systems are not fully supported with ICON at this time.
• **Recommended Browsers.** Chrome and Firefox are recommended to access ICON reliably. Other browsers, including Safari, are more likely to experience technical issues with pictures and figures used within ICON.

Students who need assistive technologies will have different computer and technology requirements. Please check with **Student Disability Services** to determine the requirements for the specific technologies needed to support your online class components.

Need help with ICON or technology? Please contact the **ITS Helpdesk** (319 384-HELP).

### Required Textbook/Media

The **required textbook(s)/resources** for this course are:

- **Textbook:** The following e-Textbook is provided as part of ICON Direct Textbooks and $104.99 will be applied to your U-Bill.  

- **Online Homework:** Access to online homework is provided as part of ICON Direct Textbooks and $55.13 will be applied to your U-Bill.  

- **Calculator:** A basic scientific calculator (for example TI30Xa or TI-30XIIS) is allowed during exams. Graphing calculators are NOT allowed during exams.

- **Gradescope** – free software/app for submitting assignments. More information about access will be provided.

- **PDF generator/converter software.** Students will need a way to create a single pdf of multiple page assignments. Many free app options are available, including Genius Scan, CamScanner and Microsoft Office Lens.

### Recommended (optional) materials/resources for this course are:

- **Spiral or loose-leaf paper notebook or electronic notebook:** Highly recommended as an organized place for working on online homework problems

- **Zoom via webcam** – web conferencing software for access to TAs with virtual drop-in office hours. TAs’ personal Zoom links will be available on ICON.

### Opt Out for ICON Direct Electronic Materials

To be discussed in the August 22nd lecture: To maintain compliance with HEA funding rules found in the [Code of Federal Regulations](#), an opt-out mechanism for course fee-funded electronic course materials is provided. Our course has two ICON Direct listings: 1) ALEKS and 2) *Learning Catalytics with eTextbook* (listed as Modified Mastering Chemistry with Pearson Etext...)  
By choosing to opt-out of either or both listings, you will no longer have access to **ALL** the electronic materials provided in that specific listing. For example, you cannot choose to opt out of the eTextbook without also losing access to *Learning Catalytics*. If you choose to opt out of ALEKS, you will not be able to earn ALEKS points, which corresponds to missing up to 190 pts. If you choose to opt out of *Learning Catalytics*, you will not be able to earn 70 points from *Learning Catalytics*, and you will not have access to the e-textbook. Since opting out would severely limit the grade that you could obtain in this course, we **strongly recommend that you do not opt out.** Access to ALEKS and *Learning Catalytics* is cheaper through the negotiated course fee than as stand-alone products.
After reading the preceding description, if you still wish to opt out, instructions can be found in the General Information Module of our ICON course. The opt-out period ends on the last add date of the semester, which is September 2\textsuperscript{nd} at 6:00 PM. If you have opted out by mistake, please use the same instructions in our ICON course to opt back in before the September 2\textsuperscript{nd} deadline. You cannot change your decision after Sept. 2\textsuperscript{nd}.

**Grading Criteria**

Final course grades will be assessed based on the student’s performance in the following items:

<table>
<thead>
<tr>
<th>Graded Component</th>
<th>Points</th>
<th>% of final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Midterm Exams</td>
<td>375 pts.</td>
<td>37.5% (12.5% each)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>125 pts.</td>
<td>12.5%</td>
</tr>
<tr>
<td>ICON Quizzes</td>
<td>150 pts.</td>
<td>15.0%</td>
</tr>
<tr>
<td>Discussion Activities</td>
<td>160 pts.</td>
<td>16.0%</td>
</tr>
<tr>
<td>ALEKS Assignments</td>
<td>150 pts.</td>
<td>15.0%</td>
</tr>
<tr>
<td>ALEKS Pie Completion</td>
<td>40 pts.</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

**Total:** 1000 pts. 100%

Final course grades will be assigned as follows. If you achieve the minimum number of points required for a given letter grade range below, you will not receive a lower grade regardless of the distribution. For example, a letter grade of C- or higher is guaranteed if you obtain 600 points or more by the end of the semester.

<table>
<thead>
<tr>
<th>Letter Grade Range</th>
<th>Points</th>
<th>Point Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range (A-, A, A+)</td>
<td>850.0 – 1000</td>
<td>85.0 – 100%</td>
</tr>
<tr>
<td>B range (B-, B, B+)</td>
<td>725.0 – 849.9</td>
<td>72.5 – 84.9%</td>
</tr>
<tr>
<td>C range (C-, C, C+)</td>
<td>600.0 – 724.9</td>
<td>60.0 – 72.4%</td>
</tr>
<tr>
<td>D range (D-, D, D+)</td>
<td>500.0 – 599.9</td>
<td>50.0 – 59.9%</td>
</tr>
<tr>
<td>F range</td>
<td>below 500.0</td>
<td>below 50.0%</td>
</tr>
</tbody>
</table>

Plus and minus grades will be assigned. Those grades will not necessarily be evenly split among the three categories (for example, # B- ≠ # B ≠ # B+). The grade of A+ will be assigned to reward exceptional achievement, typically around the top 1% of the class. Minor adjustments can be made at the end of the semester if necessary.

Opportunities to earn points in the course are complete once the final exam is finished (by December 16\textsuperscript{th}). At that point, there is no opportunity for additional extra credit or redoing assignments for the chance to change your letter grade. Additionally, we will not round your final percentage up to the nearest whole percentage point.

**Course Learning Activities**

To successfully complete this course, students will

- Read assigned chapters and download lecture notes.
- Attend and actively participate in lecture.
- Participate and complete *Learning Catalytics* review questions in discussion.
- Participate and complete a weekly group worksheet in discussion.
- Complete ALEKS online homework.
Complete online ICON quizzes.
Complete in-person exams.
Watch supplemental media.
Frequently check ICON and read announcements.

Course Assessment

ICON Quizzes (12):
There will be 12 online ICON quizzes. Quizzes occur on most weeks except on weeks of the midterm exams. The quizzes cover material from the lectures and assignments and are meant to assess how well you are retaining information and mastering the concepts. Quizzes will be administered in ICON on Thursdays (except the first quiz will be on Friday) and will be available from 8:30 AM to 11:59 PM on the quiz day. See the course calendar for specific dates for the quizzes labeled Quiz A through Quiz L.

Once started, you will have 20 minutes to complete the quiz. Each quiz will consist of 5 multiple-choice, matching, and/or fill-in the blank questions and will be worth a total of 15 points based on accuracy. Over the entire course, 180 points will be offered in quizzes, but a value of 150 points will be defined as full quiz credit. The overage points offered provide a cushion so students still can achieve the maximum quiz points should an absence occur or have an occasional poor performance on the review activity. Overage points are NOT offered as extra credit points.

Answers to the quiz questions will be available after the due date. There will be no extensions to quiz deadlines; no make-up quizzes will be offered. For extended illnesses over multiple weeks, students should contact the instructors.

Quizzes are to be completed individually by the student registered for this course. Students can use their personal class notes (electronic or hardcopy formats) during the quiz. Students are not permitted to get assistance from any other individual or online resource, nor are students permitted to assist other students with the quiz. Students are not to take pictures of the quiz. Any student who sees what they think is a part of a quiz is to report it immediately to the instructors. Any student getting assistance on a quiz or posting anything in texts, social media, and/or the internet about a quiz will be reported to CLAS for academic misconduct.

In-person Discussion Activities (14):
Discussion sections are limited to up to 28 students and will meet in-person (consult your class schedule on MyUI for your assigned time and location). The discussion sections are a very helpful, more personal complement to lectures and provide students with the opportunity to ask questions, gain problem-solving experience and work in peer teams. Graduate teaching assistants (TAs) will facilitate learning teams by highlighting key course concepts and efficient problem-solving strategies. Attendance and participation are expected throughout the entire semester.

Discussion sections meet weekly starting on the first week of classes (August 22-26) and then throughout the semester with 14 weeks counting for points. Components of discussion include an individual and group Learning Catalytics (LC) online review activity, and a peer-team worksheet to promote discussion, support deeper understanding of material and develop key problem-solving skills. You will need a web-enabled device to connect to LC and Gradescope for the discussion activity. Teamwork completed in discussion must be submitted using Gradescope. It is the responsibility of all team members to check that their discussion document has been submitted and all members tagged within 30 minutes of their discussion period. You cannot participate in guided-inquiry activities and class discussion if you are not present (i.e., attending your enrolled in-person section). During discussion sections, accessing LC from a remote location during class time will not be accepted for credit and is considered academic misconduct.

Starting in the second week of the semester, 13 points can be earned weekly for participation and performance in discussion activities. Tuesday through Friday discussion sections will meet the first week of classes, but points will be awarded starting on August 30. Monday discussion sections will be awarded points.
on the first day of classes, August 22, due to the Labor Day holiday in the third week of the semester. A maximum of 160 discussion points can be earned for the course. The 13 points earned each week are based on your active participation and contributions to group activities (8 pts broken down into 4 pts active participation and 4 pts quality and accuracy of worksheet responses), and performance on the LC review activity (5 pts). It is expected in the discussion sections that all students actively participate by answering and asking questions in these small group activities. While 182 points are offered through discussion activities, only a maximum of 160 points will be counted toward the course grade.

The overage points offered provide a cushion so students still can achieve the maximum discussion points should an absence occur or have poor performance on the review activity on occasion. If the absence is due to illness or a University-sanctioned reason and the student wishes to make up the absence, the student should submit a CLAS absence form to the course email address AND contact their discussion TA to arrange attendance in a different section that meets in the same calendar week M-F, which in some cases may mean that you may need to attend prior to your regular section. For extended illnesses over multiple weeks, students should contact the instructors.

**ALEKS Online Homework Assignments (17):**

ALEKS (Assessment and LEarning in Knowledge Spaces) is an adaptive, Web-based homework system that helps students improve their problem-solving skills and conceptual understanding of chemistry while also remediating gaps in prerequisite knowledge. To access ALEKS, please follow the instructions provided on the CHEM:1070 ICON homepage. There are two main components of ALEKS that will be utilized in this course: Assignments and Pie Completion.

Seventeen ALEKS assignments (called “Objectives/Modules” in ALEKS) will be assigned throughout the semester associated with the chapters covered in the course (see course calendar for due dates). Each of the 11 chapters has one or two assignments that sum to a chapter point total in the range from 10 to 18 points. While a total of 165 points are available through ALEKS assignments, only a maximum of 150 points will be counted towards the grade. The overage points offered provide a cushion so students still can achieve the maximum homework points should an absence occur or have poor performance on a homework assignment. There will be no extensions to homework deadlines. For extended illnesses over multiple weeks, students should contact the instructors.

Due to the adaptive nature of ALEKS, **students must first complete an Initial Knowledge Check assessment before any assignments are released.** The Initial Knowledge Check takes approximately 30-45 minutes to complete and helps ALEKS determine a student’s prerequisite knowledge. The results of a student’s Initial Knowledge Check and how a student progresses through an assignment will determine the total number of questions per assignment. Therefore, not all students will have the same number of questions for an assignment.

Additionally, if a student does not complete an assignment before the specified deadline, ALEKS requires students to finish certain questions from prior assignments that it deems as necessary prerequisite knowledge for the current assignment. Any questions deemed as prerequisite knowledge must be completed before ALEKS releases the rest of the questions from the current assignment and no credit will be given back to the original assignment where those questions were introduced. Therefore, it is in your best interest to work in ALEKS on a regular basis to complete all assignments prior to their deadlines, or else you may quickly fall behind. The instructors have created two-part assignments for many chapters to help students work in ALEKS regularly. Further details on how ALEKS works can be found on the CHEM:1070 ICON site.

**ALEKS Online Pie Completion:**

ALEKS measures topics learned and mastery of course material with completion of a pie chart throughout the semester. As a student completes their assignments, their course pie chart will fill in. ALEKS will switch to “Open Pie Mode” if a student completes all the topics in the current homework assignment before the due date and before the next assignment is released. In Open Pie Mode, students can return to previous topics.
they missed or left incomplete, review previous topics, and/or work ahead on upcoming topics. Additionally, several Open Pie Mode times have been scheduled for several days before each midterm exam, during Thanksgiving break, and before the final exam. When a student returns to previous assignments during Open Pie Mode and completes missed topics, points do not add to the overdue homework assignment; rather, progress is shown toward pie completion. For this course component, a maximum of 40 points will be assigned to students who achieve 85% or greater completion of their pie chart. For students who complete less than 85% of their pie chart, points will be scaled according to the percentage less than 85% achieved.

**Lecture Participation and Learning Catalytics (LC):**

Lectures will occur in person every Monday, Wednesday, and Friday throughout the entire semester. The lecture component may involve small-group and large-class discussions of material, work on problem-solving strategies, and utilize Learning Catalytics. Peer learning assistants (LAs) will be embedded in the lecture auditorium to help facilitate discussion within smaller student groups during the lecture. It is highly recommended that students attend and participate in every lecture for the best learning experience. The lecture instructors plan to capture the audio and slides presented in one of the lectures per day and post the recording in subsequent days for student access. These recordings are not meant as a substitution for attending lecture, but are meant as a resource for students who are absent due to a University-sanctioned reason (e.g. illness, University athletic event) so that they can stay up-to-date with the class. Posting these recordings is not guaranteed pending unexpected technical issues.

Students are expected to continuously engage in the lecture material and use Learning Catalytics (LC), a student response online system, to submit responses to questions embedded throughout the lectures. You will need a personal device (smartphone, laptop, tablet, etc.) that can connect to the web and LC during lecture. The instructors will award up to 4 bonus points to each unit exam based on the level of student in-Lecture LC participation (not accuracy). If a student attends lecture, actively participates and submits their LC answers during each lecture period associated with the material in a midterm exam unit, bonus extra-credit points will be awarded for that exam unit. These bonus point opportunities apply to Units 1-3, so this means that up to 12 extra points can be awarded throughout the semester. No make-up opportunities will be given since these are bonus points. However, bonus points per unit exam will be assessed based on the percentage of lectures in which a student participates. Accessing LC from a remote location or aiding another student to access LC from a remote location during class time is considered academic misconduct.

**In-person Exams (4):**

There are three 1½-hour unit exams and a 2-hour cumulative final exam. All exams will be closed book and closed notes, and given in person at campus locations (to be announced). Unit exams consist of a combination of multiple-choice and free response questions. The multiple-choice portion of the exams are graded on the number of correct answers, with no penalty for guessing, while the free response portion can earn partial credit. The final exam will be cumulative and consist of only multiple-choice questions and no free response questions. Exams are to be completed individually by the student registered for this course.

- **Exam 1:** Tuesday, September 20 (09/20/2022) 6:30PM - 8:00PM CT  Unit 1
- **Exam 2:** Tuesday, October 18 (10/18/2022) 6:30PM - 8:00PM CT  Unit 2
- **Exam 3:** Tuesday, November 15 (11/15/2022) 6:30PM - 8:00PM CT  Unit 3
- **Final Exam:** date and time to be announced by the Registrar (Cumulative) all 4 Units

Students will need the following items during the exam: #2 pencils (wood or mechanical), an eraser, a blue or black pen, their University ID, and a basic scientific calculator (for example TI30Xa or TI-30XIIS). The instructors will provide a printout of the class equation sheet, periodic table, and if necessary, blank scratch paper. Graphing calculators, programmable calculators, data transmitting devices (e.g., cell phone), or wearable technology capable of transmitting or receiving communications (e.g., smartwatch) must be put in ‘airplane mode’ and stowed under your seat during the exam. Exam rooms, based on your last name, will be announced
in class and posted on the ICON website. Make-up exams or rescheduling will **not** be offered to accommodate holiday or other travel plans. See the section below on Make-Up Examinations for policies and procedures concerning missed exams.

Students are not permitted to get assistance from any other individual or online resource during the exam, nor are students permitted to assist other students during the exam. Any student getting assistance on an exam or posting anything in texts, social media, and/or the internet about an exam during the examination period will be reported to CLAS for academic misconduct.

**Course Resources**

**Course Website:**

CHEM 1070 – Iowa Courses Online (ICON) website URL = [http://icon.uiowa.edu/](http://icon.uiowa.edu/). Use your Hawk ID and Hawk ID password to log in to ICON. This website includes a link to ALEKS (homework), Learning Catalytics, and an eText version of the textbook. Lecture notes, captured lecture recordings, sample exams, ICON quizzes, discussion worksheets, course and exam announcements, and other info will be posted on ICON, so the instructors encourage you to check ICON frequently.

**Course Administration – Chemistry Center:**

Contact the Chemistry Center (E225 CB) for drop/add signatures, section changes, make-up exam scheduling, tutor lists, submitting SDS accommodation letters, and general questions. Chemistry Center contact information: 319-335-1341, chemistry-center@uiowa.edu, Chemistry Center manager is Trent Tappan. Hours are Monday-Thursday 8 AM – 5 PM and Friday 8 AM – 4:30 PM.

**Teaching Assistant (TA) Drop-in Office Hours:**

Discussion TAs will have scheduled drop-in office hours weekly. TAs will have in-person hours and some TAs may also have virtual hours via Zoom. More information will be posted on the CHEM:1070 ICON website at the beginning of the semester with the date, time, and modality of the TAs’ hours. Any of the TAs for this course should be able to assist you in office hours regardless of whether they are your assigned TA.

**Elements of Success (EoS):**

Elements of Success (EoS) is an online tool that will compile your posted scores and track your progress in the course. A link to EoS will be found in the navigation menu of our ICON course within the first few weeks of the semester. Students are encouraged to monitor EoS weekly.

**Additional Instructional and Tutoring Resources:**

The following University resources may be helpful to you throughout the semester. These services are offered outside of the Department of Chemistry. Please contact the individual resource to inquire about eligibility and/or whether services are offered in Fall 2022.

- Supplemental Instruction through University College: [https://tutor.uiowa.edu/find-help/supplemental-instruction/](https://tutor.uiowa.edu/find-help/supplemental-instruction/)
- Tutor Iowa: [http://tutor.uiowa.edu](http://tutor.uiowa.edu)

You may also be eligible for additional support through the following:

- Athletics Student Tutoring: [https://academics.hawkeyesports.com/academic-success](https://academics.hawkeyesports.com/academic-success)
- College of Engineering Tutoring: [https://engineering.uiowa.edu/current-students/academic-support-and-tutoring/engineering-tutoring](https://engineering.uiowa.edu/current-students/academic-support-and-tutoring/engineering-tutoring)
- Nursing/Pre-Nursing Academic Support: [https://nursing.uiowa.edu/diversity/academicsupport](https://nursing.uiowa.edu/diversity/academicsupport)
- TRIO Student Support Services: [https://diversity.uiowa.edu/programs/student-support/trio-student-support-services](https://diversity.uiowa.edu/programs/student-support/trio-student-support-services)
Course Policies & Expectations

The following policies apply to students registered in this course.

**Makeup Exams:** To qualify for a make-up examination, the exam absence must be due to illness, religious obligations, recognized University activities, unavoidable circumstances, or have prior instructor permission (see link for further explanation of recognized or unavoidable circumstances: [https://clas.uiowa.edu/faculty/student-attendance-and-absences](https://clas.uiowa.edu/faculty/student-attendance-and-absences)). To request a make-up exam for known conflicts, such as recognized University activities or religious obligations, the online form must be completed 5 days before the exam date and should include supporting documentation. To request a make-up exam due to unavoidable circumstances, such as illness, the online Makeup Exam Request form must be completed within 5 days before or after the missed exam and should include supporting documentation. A link to the request form is available on ICON and here ([https://forms.office.com/r/EjWUMU1ABu](https://forms.office.com/r/EjWUMU1ABu)). The decision as to the acceptability of any make-up request rests with the instructors and a point penalty may be imposed. Work, vacation, or other travel plans are NOT recognized as a valid excuse for taking a make-up exam. Penalties will be assigned by the instructor, up to and including a zero score on the exam, for exam make-ups not meeting these requirements.

Make-up exams are comparable to the regular unit exams, but you will not be able to have permanent access to the make-up exam for future studying. Instead, contact the instructors to arrange a time to review your make-up exam during office hours and you will be provided a copy of the regular unit exam questions given to the entire class. Make-up exams will be given in Room W290 CB at the times listed below.

- **Make-up Exam #1:** Friday, September 30th (09/30/2022) 6:00PM - 7:30PM CT
- **Make-up Exam #2:** Friday, October 28th (10/28/2022) 6:00PM - 7:30PM CT
- **Make-up Exam #3:** Friday, December 2nd (12/02/2022) 6:00PM - 7:30PM CT

**Final Exam Conflicts:** The final exam will be given in person at the scheduled date and time announced by the Registrar around the fifth week of the semester. Until the final examination schedule has been published and all make-up final examination arrangements have been completed, students should be prepared to be available on campus from the first final exam period until the last exam period of the final exam week. A student with two final examinations scheduled for the same period or more than three examinations scheduled for the same day may file a request for a change of schedule before the October 1 deadline ([https://registrar.uiowa.edu/makeup-final-examination-policies](https://registrar.uiowa.edu/makeup-final-examination-policies)) at the Registrar's Service Center, 17 Calvin Hall, M–F, 8:00 AM–4:30 PM (319-384-4300). For exam conflicts during the Fall semester, the course having the lower department letter will take precedence.

**Classroom Expectations:** Students are expected to comply with University policies regarding appropriate classroom behavior as outlined in the [Code of Student Life](https://www.studentlife.uiowa.edu/policies). In the event that a student disrupts the classroom environment through the failure to comply with the reasonable directive of an instructor or the University, the instructor has the authority to ask that the student immediately leave the space for the remainder of the class period. Additionally, the instructor is asked to report the incident to the [Office of Student Accountability](https://www.studentlife.uiowa.edu/accountability) for the possibility of additional follow-up.

**Communications:** Students can expect to receive weekly communications from the instructors (via course “Announcements”). Students should check the ICON Discussion board first as common questions will be addressed there. You can expect to receive responses to your inquiries within 2 business days. Students are responsible for official correspondences sent to the UI email address (uiowa.edu) and must use this address for all communication within UI ([Operations Manual, III.15.2](https://www.studentlife.uiowa.edu/manual)).
**Academic Misconduct:** The College of Liberal Arts and Sciences academic misconduct policy is available in the Student Academic Handbook. Academic misconduct may result in a grade reduction and/or other serious penalties, up to and including expulsion from the University.

Each of the items below describes the instructors’ expectations on collaborative work. If you have any questions or are unclear about the following descriptions, you must contact your professors.

- **Examinations:** Cheating will not be tolerated. Exams are closed book and closed notes and are to be completed individually by the student registered for this course. Any student getting assistance on an exam or posting anything in texts, social media, and/or the internet about an exam during the exam period will be reported to CLAS for academic misconduct. Students are expected to follow all instructions provided by the instructors and teaching assistants during the exam.

- **ALEKS homework:** You must complete your own ALEKS homework. For your ultimate benefit in terms of exam performance, we encourage you to discuss problem-solving strategies in groups, but questions must be answered individually and not all students will have the same questions or same number of questions in ALEKS. TAs and faculty drop-in office hours are some of the resources that are available to help you gain the necessary understanding and problem-solving skills to successfully complete the assignments.

- **ICON Quizzes:** Quizzes are to be completed individually by the student registered for this course. Students can use their personal class notes (electronic or hardcopy formats) during the quiz. Students are not permitted to get assistance from any other individual or online resource, nor are students permitted to assist other students with the quiz. Students are not to take pictures of the quiz. Any student who sees what they think is a part of a quiz is to report it immediately to the instructors. Any student getting assistance on a quiz or posting anything in texts, social media, and/or the internet about a quiz will be reported to CLAS for academic misconduct.

- **Discussion:** Students will work in groups in discussion for the Learning Catalytics review questions and the worksheet. Students are expected to actively participate in the group activities. When the group worksheet is uploaded for submission on Gradescope, students identified on the worksheet are expected to have attended class and contributed that day. Students are not permitted to ask group members to submit their name on the work when they did not attend, and group members are not permitted to include students who did not attend. Any mischaracterization of group members’ contributions will be reported to CLAS for academic misconduct.

**Due Dates and Missed Deadlines:** Any student who has an extended absence due to a University-sanctioned reason (e.g., illness, family emergency, etc.) is encouraged to contact the instructors.

If a student has an absence for a short while (i.e., a few days) and misses an assignment or course component, the opportunity for a make-up of a specific assignment will depend on the course component:

- If a midterm exam is missed, students will need to fill out a Makeup Exam Request form on ICON within 5 days of the absence (see Makeup Exams section of syllabus for details).
- If a discussion is missed, students need to submit a CLAS absence form to the course email address AND should contact their TA right away to inquire about makeup possibilities (see Discussion section of syllabus for details); otherwise, the designed point overage in discussion can provide cushion for the absence.
- If an ICON quiz is missed, no make-up opportunities are provided, and the designed point overage can provide cushion for the missed quiz (see ICON Quizzes).
- If an ALEKS assignment is not finished by the due date, students will be given credit for whatever work was completed by the deadline, but extensions will not be granted. The designed point overage can provide cushion for the missed homework assignment. Students will have an opportunity to work on past due assignments, not for points toward the assignment, but rather for points toward their ALEKS pie completion (see the ALEKS section for more details).
**Netiquette:** The term “netiquette” refers to the do’s and don’ts of online communication. As it applies to any virtual drop-in office hours or communication within this course, it is our expectation that students will communicate effectively and respectfully with each other and the instructors and TAs. When using a webcam, students must make sure their dress and background are appropriate for a classroom setting. Students may choose to use an electronic background on their webcam during Zoom meetings.

**College of Liberal Arts and Sciences Policies**

**Home of the Course:** The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the course’s add and drop deadlines, the “second-grade only” option (SGO), and other undergraduate policies and procedures. Different UI colleges may have other policies or deadlines. See https://clas.uiowa.edu/students/handbook. Questions? Contact CLAS at clasps@uiowa.edu or 319-335-2633.

**Attendance and Classroom Expectations:** Students are responsible for attending class and for knowing an instructor’s attendance policies, which vary by course and content area. All students are expected to attend class and to contribute to its learning environment in part by complying with University policies and directives regarding appropriate classroom behavior or other matters.

**Absences:** Students are responsible for communicating with instructors as soon they know that an absence might occur or as soon as possible in the case of an illness or an unavoidable circumstance. Students can use the CLAS absence form to help communicate with instructors who will decide if the absence is excused or unexcused; the form is located on ICON within the top banner under "Student Tools.” Delays by students in communication with an instructor could result in a forfeit of what otherwise might be an excused absence (https://clas.uiowa.edu/students/handbook/attendance-absences).

**Absences: Illness, Unavoidable Circumstances, and University Sponsored Activities:** Students who are ill, in an unavoidable circumstance affecting academic work, or who miss class because of a University sponsored activity are allowed by UI policy to make up a missed exam. Documentation is required by the instructor except in the case of a brief illness. Students are responsible for communicating with instructors as soon as the absence is known (https://clas.uiowa.edu/students/handbook/attendance-absences).

**Absences: Holy Days:** The University is prepared to make reasonable accommodations for students whose religious holy days coincide with their classroom assignments, test schedules, and classroom attendance expectations. Students must notify their instructors in writing of any such Religious Holy Day conflicts or absences within the first few days of the semester or session, and no later than the third week of the semester. If the conflict or absence will occur within the first three weeks of the semester, the student should notify the instructor as soon as possible. See Operations Manual 8.2 Absences for Religious Holy Days for additional information, https://opsmanual.uiowa.edu/students/absences-class#8.2.

**Absences: Military Service Obligations:** Students absent from class due to U.S. veteran or U.S. military service obligations (including military service-related medical appointments, military orders, and National Guard Service obligations) must be excused without penalty. Instructors must make reasonable accommodations to allow students to make-up exams or other work. Students must communicate with their instructors about the expected possibility of missing class as soon as possible. (For more information, see https://opsmanual.uiowa.edu/iv-8-absences-class%2C2%2A0-0).

**Academic Misconduct:** All undergraduates enrolled in courses offered by CLAS have in essence agreed to the College’s Code of Academic Honesty. Academic misconduct affects a student’s grade and is reported to the College which applies an additional sanction, such as suspension. Outcomes about misconduct are communicated through UI email (https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).

**Academic Accommodations for Students with Disabilities:** UI is committed to providing an educational experience that is accessible to all students. If a student has a diagnosed disability or other disabling condition that may impact the student’s ability to complete the course requirements as stated in the syllabus, the student may seek accommodations through Student Disability Services (SDS). SDS is responsible for making
Letters of Accommodation (LOA) available to the student. The student must provide a LOA to the instructor as early in the semester as possible, but requests not made at least two weeks prior to the scheduled activity for which an accommodation is sought may not be accommodated. The LOA will specify what reasonable course accommodations the student is eligible for and those the instructor should provide. Additional information can be found on the SDS website. ([https://sds.studentlife.uiowa.edu/](https://sds.studentlife.uiowa.edu/)).

**Class Recordings: Privacy and Sharing:** Course lectures and discussions are sometimes recorded. These are only available to students registered for the course and the intellectual property of the faculty member. These materials may not be shared or reproduced without the explicit written consent of the instructors. Students may not share these recordings with those who are not enrolled in the course; likewise, students may not upload recordings to any other online environment. Doing so is a breach of the Code of Student Conduct and could be a violation of the Federal Education Rights and Privacy Act (FERPA); also see https://dos.uiowa.edu/policies/code-of-student-life/.  

**Communication: UI Email:** Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community (Operations Manual, III.15.2). Emails should be respectful and brief, with complex matters addressed during the instructor’s drop-in hours, for example. Faculty are not expected to answer email after business hours or during the weekends.  

**Complaints about Academic Matters:** Students with a complaint about a grade or a related academic issue should first visit with the instructor and then with the course supervisor (if one is assigned), and next with the Chair of the department or program offering the course. If not resolved, students may bring their concerns to the College of Liberal Arts and Sciences: [https://clas.uiowa.edu/students/handbook/student-rights-responsibilities](https://clas.uiowa.edu/students/handbook/student-rights-responsibilities). 

**Final Examination Policies:** The final exam schedule is published during the fifth week of the fall and spring semesters or on the first day of summer classes; students are responsible for knowing the date, time, and place of their final exams. Students should not make travel plans until knowing this information. A student with exams scheduled on the same day and time or who have more than two final exams on the same day should visit this page for how to resolve these problems by the given deadline: [https://registrar.uiowa.edu/makeup-final-examination-policies](https://registrar.uiowa.edu/makeup-final-examination-policies). No exams may be scheduled the week before finals; some exception, however, have been made for labs, language courses, and off-cycle courses ([https://registrar.uiowa.edu/final-examination-scheduling-policies](https://registrar.uiowa.edu/final-examination-scheduling-policies)).

**Free Speech and Expression:** The University of Iowa supports and upholds the First Amendment protection of freedom of speech and the principles of academic and artistic freedom. We are committed to open inquiry, vigorous debate, and creative expression inside and outside of the classroom. Visit Free Speech at Iowa for more information on the University’s policies on free speech and academic freedom ([https://freespeech.uiowa.edu/](https://freespeech.uiowa.edu/)).

**Mental Health:** Students are encouraged to be mindful of their mental health and seek help as a preventive measure or if feeling overwhelmed and/or struggling to meet course expectations. Students are encouraged to talk to their instructor for assistance with specific class-related concerns. For additional support and counseling, students are encouraged to contact University Counseling Service (UCS). Information about UCS, including resources and how to schedule an appointment, can be found at counseling.uiowa.edu. Find out more about UI mental health services at: [mentalhealth.uiowa.edu](http://mentalhealth.uiowa.edu). After hours, students are encouraged to call the Johnson County Community Crisis Line at (319) 351-0140 or dial 911 in an emergency.

**Nondiscrimination in the Classroom:** The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy, disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, associational preferences, or any other classification that deprives the person of consideration as an individual. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on nondiscrimination policies, contact the
Sexual Harassment: The University of Iowa prohibits all forms of sexual harassment, sexual misconduct, and related retaliation. The Policy on Sexual Harassment and Sexual Misconduct governs actions by students, faculty, staff and visitors. Incidents of sexual harassment or sexual misconduct can be reported to the Title IX and Gender Equity Office or to the Department of Public Safety. Students impacted by sexual harassment or sexual misconduct may be eligible for academic supportive measures and can learn more by contacting the Title IX and Gender Equity Office. Information about confidential resources can be found here. Watch the video for an explanation of these resources.
Tentative Course Calendar

Manage your time effectively to complete the assigned course work according to the firm due dates listed in the calendar below.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Day</th>
<th>Lectures, Quizzes, and Exams</th>
<th>Lecture Instructor</th>
<th>Due Dates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 22</td>
<td>M</td>
<td>Introduction &amp; Syllabus</td>
<td>AS, MM, MS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 W</td>
<td></td>
<td>Chapter 1 Chemistry in Our Lives</td>
<td>Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26 F</td>
<td></td>
<td>Chapter 1 &amp; Chapter 2, &amp; ICON Quiz A</td>
<td>Maalouf Quiz A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29 M</td>
<td></td>
<td>Chapter 2 Chemistry and Measurements</td>
<td>Strathman ALEKS 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31 W</td>
<td></td>
<td>Chapter 2</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sep 1 Th</td>
<td></td>
<td>ICON Quiz B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 F</td>
<td></td>
<td>Chapter 3 Matter and Energy</td>
<td>Strathman</td>
<td>Quiz B</td>
</tr>
<tr>
<td></td>
<td>5 M</td>
<td></td>
<td>NO CLASSES (University holiday)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 W</td>
<td></td>
<td>Chapter 3</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 Th</td>
<td></td>
<td>ICON Quiz C</td>
<td></td>
<td>Quiz C</td>
</tr>
<tr>
<td></td>
<td>9 F</td>
<td></td>
<td>Chapter 3</td>
<td>Strathman</td>
<td>ALEKS 3 Part 1</td>
</tr>
<tr>
<td></td>
<td>12 M</td>
<td></td>
<td>Chapter 4 Atoms and Elements</td>
<td>Strathman</td>
<td>ALEKS 3 Part 2</td>
</tr>
<tr>
<td></td>
<td>14 W</td>
<td></td>
<td>Chapter 4</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 Th</td>
<td></td>
<td>ICON Quiz D</td>
<td></td>
<td>Quiz D</td>
</tr>
<tr>
<td></td>
<td>16 F</td>
<td></td>
<td>Chapter 4</td>
<td>Strathman</td>
<td>ALEKS 4 Part 1</td>
</tr>
<tr>
<td></td>
<td>19 M</td>
<td></td>
<td>Tentative Chapter 4/ Exam 1 Q &amp; A</td>
<td>Instructors &amp; LAs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 T</td>
<td></td>
<td>Exam 1 – Unit 1 at 6:30-8:00 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 W</td>
<td></td>
<td>Chapter 4</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23 F</td>
<td></td>
<td>Unit 2 Chapter 6 Ionic and Molecular Compounds</td>
<td>Sinnwell</td>
<td>ALEKS 4 Part 2</td>
</tr>
<tr>
<td></td>
<td>26 M</td>
<td></td>
<td>Chapter 6</td>
<td>Sinnwell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28 W</td>
<td></td>
<td>Chapter 6</td>
<td>Sinnwell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29 Th</td>
<td></td>
<td>ICON Quiz E</td>
<td></td>
<td>Quiz E</td>
</tr>
<tr>
<td></td>
<td>30 F</td>
<td></td>
<td>Chapter 6</td>
<td>Sinnwell</td>
<td>ALEKS 6 Part 1</td>
</tr>
<tr>
<td></td>
<td>Oct 3 M</td>
<td></td>
<td>Chapter 6 and Chapter 7 Chemical Reaction and Quantities</td>
<td>Sinnwell/ Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 W</td>
<td></td>
<td>Chapter 7</td>
<td>Maalouf</td>
<td>ALEKS 6 Part 2</td>
</tr>
<tr>
<td></td>
<td>6 Th</td>
<td></td>
<td>ICON Quiz F</td>
<td></td>
<td>Quiz F</td>
</tr>
<tr>
<td></td>
<td>7 F</td>
<td></td>
<td>Chapter 7</td>
<td>Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 M</td>
<td></td>
<td>Chapter 7</td>
<td>Maalouf</td>
<td>ALEKS 7 Part 1</td>
</tr>
<tr>
<td></td>
<td>12 W</td>
<td></td>
<td>Chapter 7</td>
<td>Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13 Th</td>
<td></td>
<td>ICON Quiz G</td>
<td></td>
<td>Quiz G</td>
</tr>
<tr>
<td></td>
<td>14 F</td>
<td></td>
<td>Chapter 8 Gases</td>
<td>Strathman</td>
<td>ALEKS 7 Part 2</td>
</tr>
<tr>
<td></td>
<td>17 M</td>
<td></td>
<td>Tentative Chapter 8/ Exam 2 Q &amp; A</td>
<td>Instructors &amp; LAs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18 T</td>
<td></td>
<td>Exam 2 – Unit 2 at 6:30-8:00 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19 W</td>
<td></td>
<td>Chapter 8</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 F</td>
<td></td>
<td>Chapter 8</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 M</td>
<td></td>
<td>Chapter 9 Solutions</td>
<td>Maalouf</td>
<td>ALEKS 8</td>
</tr>
<tr>
<td></td>
<td>26 W</td>
<td></td>
<td>Chapter 9</td>
<td>Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27 Th</td>
<td></td>
<td>ICON Quiz H</td>
<td></td>
<td>Quiz H</td>
</tr>
<tr>
<td></td>
<td>28 F</td>
<td></td>
<td>Chapter 9</td>
<td>Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31 M</td>
<td></td>
<td>Chapter 9</td>
<td>Maalouf</td>
<td>ALEKS 9 Part 1</td>
</tr>
<tr>
<td></td>
<td>Nov 2 W</td>
<td></td>
<td>Chapter 9</td>
<td>Maalouf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Th</td>
<td></td>
<td>ICON Quiz I</td>
<td></td>
<td>Quiz I</td>
</tr>
<tr>
<td></td>
<td>4 F</td>
<td></td>
<td>Chapter 10 Reaction Rates and Chemical Equilibrium</td>
<td>Sinnwell</td>
<td>ALEKS 9 Part 2</td>
</tr>
<tr>
<td></td>
<td>7 M</td>
<td></td>
<td>Chapter 10</td>
<td>Sinnwell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9 W</td>
<td></td>
<td>Chapter 10</td>
<td>Sinnwell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 Th</td>
<td></td>
<td>ICON Quiz J</td>
<td></td>
<td>Quiz J</td>
</tr>
<tr>
<td></td>
<td>11 F</td>
<td></td>
<td>Chapter 10</td>
<td>Sinnwell</td>
<td>ALEKS 10</td>
</tr>
<tr>
<td></td>
<td>14 M</td>
<td></td>
<td>Exam 3 Q &amp; A</td>
<td>Instructors &amp; LAs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 T</td>
<td></td>
<td>Exam 3 – Unit 3 at 6:30-8:00 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 W</td>
<td></td>
<td>Chapter 11 Acids and Bases</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18 F</td>
<td></td>
<td>Chapter 11</td>
<td>Strathman</td>
<td>ALEKS 11 Part 1</td>
</tr>
<tr>
<td></td>
<td>21-25 M-F</td>
<td></td>
<td>NO CLASSES (University holiday)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28 M</td>
<td></td>
<td>Chapter 11</td>
<td>Strathman</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Topic</td>
<td>Instructor</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>------------------------</td>
<td>------------</td>
<td>---------------------------</td>
<td></td>
</tr>
<tr>
<td>Dec 1</td>
<td>Th</td>
<td><strong>ICON Quiz K</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>Chapter 11</td>
<td>Strathman</td>
<td>Quiz K</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>Chapter 5 Nuclear Chemistry</td>
<td>Strathman</td>
<td>ALEKS 11 Part 2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>W</td>
<td>Chapter 5</td>
<td>Strathman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Th</td>
<td><strong>ICON Quiz L</strong></td>
<td></td>
<td>Quiz L</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>F</td>
<td>Catch-up Day &amp; Review</td>
<td>MM, AS, MS</td>
<td>ALEKS 5</td>
<td></td>
</tr>
</tbody>
</table>

**16 Dec 12-16**  Final Exam: TBA by the Registrar by 5th week

*ALEKS Homework, Discussion Worksheets, and ICON quiz due dates, including any changes, will be displayed within ALEKS and on ICON. All out-of-class assignments are due at 11:59 PM unless otherwise indicated.*