# CHEMISTRY 1210 Tentative Schedule – Fall 2020

(Subject to moderate change)

Classes held on Tuesdays and Thursdays, 5:15 – 7:45 p.m.

<table>
<thead>
<tr>
<th>Date</th>
<th>Watch This Before Class (video links on Canvas):</th>
<th>In Class We’ll Work On:</th>
<th>Other Stuff (in your testing centers):</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/1</td>
<td>Welcome Video</td>
<td>Group Assignment &amp; Intro Survey</td>
<td></td>
</tr>
</tbody>
</table>
| 9/3 | All the Chapter 1 Videos | Quiz 1 (at the start of class)  
Pr. Set 1 (Ch. 1) – due by 9/4 | | |
| 9/8 | Chapter 2: 1st half of videos | Quiz 2 (at the start of class)  
Pr. Set 2 (Ch. 2) – due by 9/11 | | |
| 9/10 | Chapter 2: 2nd half of videos | Quiz 3 (at the start of class)  
Pr. Set 2 (Ch. 2) | Intro Survey: 9/7 – 9/19 |
| 9/15 | Chapter 3: 1st half of videos | Quiz 4 (at the start of class)  
Pr. Set 3 (Ch. 3) – due by 9/23 | | |
| 9/17 | Chapter 3: 2nd half of videos | Quiz 5 (at the start of class)  
Pr. Set 3 (Ch. 3) | | |
| 9/22 | Chapter 3: 2nd half of videos | Pr. Set 3 (Ch. 3), Exam 1 Review | Exam 1 (Ch. 1-3):  
9/23 – 9/30 | |
| 9/24 | Chapter 4: 1st half of videos | Pr. Set 4 (Ch. 4) – due by 10/7 | | |
| 9/29 | Chapter 4: 2nd half of videos | Quiz 6 (at the start of class)  
Pr. Set 4 (Ch. 4) | | |
| 10/1 | Chapter 4: 2nd half of videos | Pr. Set 4 (Ch. 4) | | |
| 10/6 | Chapter 5: 1st half of videos | Pr. Set 5 (Ch. 5) – due by 10/14 | | |
| 10/13 | Chapter 5: 2nd half of videos | Quiz 5 (at the start of class)  
Pr. Set 5 (Ch. 5), Exam 2 Review | Anonymous Survey  
(10/6 – 10/18) | |
| 10/15 | Chapter 6: 1st half of videos | Pr. Set 6 (Ch. 6) – due by 10/21 | Exam 2 (Ch. 4-5):  
10/14 – 10/21 | |
| 10/20 | Chapter 6: 2nd half of videos | Quiz 6 (at the start of class)  
Pr. Set 6 (Ch. 6) | | |
| 10/22 | Chapter 7: 1st half of videos | Pr. Set 7 (Ch. 7) – due by 10/28 | | |
| 10/27 | Chapter 7: 2nd half of videos | Quiz 7 (at the start of class)  
Pr. Set 7 (Ch. 7), Exam 3 Review | | |
| 10/29 | Chapter 8: 1st half of videos | Pr. Set 8 (Ch. 8) – due by 11/4 | | |
| 11/3 | Chapter 8: 2nd half of videos | Quiz 8 (at the start of class)  
Pr. Set 8 (Ch. 8) | Exam 3 (chapters 6-7):  
10/28 – 11/2 | |
| 11/5 | Chapter 9: 1st half of videos | Pr. Set 9 (Ch. 9) – due by 11/11 | | |
| 11/10 | Chapter 9: 2nd half of videos | Quiz 9 (at the start of class)  
Pr. Set 9 (Ch. 9) | | |
| 11/12 | Chapter 10: 1st half of videos | Pr. Set 10 (Ch. 10) – due by 11/18 | | |
| 11/17 | Chapter 10: 2nd half of videos | Quiz 10 (at the start of class)  
Pr. Set 10 (Ch. 10),  
Exam 4 Review | Exam 4 (chapters 8-10):  
11/18 – 11/24 | |
| 11/19 | Chapter 11: 1st half of videos | Pr. Set 11 (Ch. 11) – due by 11/30 | | |
| *11/24 | Chapter 11: 2nd half of videos | Quiz 11 (at the start of class)  
Pr. Set 11 (Ch. 11) | | |
| *11/26 | | | NO CLASS – Thanksgiving Holiday |
| *12/1 | Chapter 12: 1st half of videos | Pr. Set 12 (Ch. 12) – due by 12/4 | Anonymous Survey  
(11/26 – 12/7) | |
| *12/3 | Chapter 12: 2nd half of videos | Quiz 12 (at the start of class)  
Pr. Set 12 (Ch. 12) | | |
| *12/8 | Final Exam Review | Final Exam Review | No-Test Week | |
| *12/10 | Final Exam Review | Final Exam Review | No-Test Week | |
| 12/14 – 12/18 | | Comprehensive Final | | |

*Classes delivered remotely during these days.

†During Exam reviews, we will go over the Exam Study Guides (available through Canvas) together.
Chemistry 1210 – Fall 2020
Principles of Chemistry I
Tuesdays and Thursdays, 5:15 – 7:45 p.m.

<table>
<thead>
<tr>
<th>Section</th>
<th>Location</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB1</td>
<td>Brigham City Campus</td>
<td>TBA</td>
</tr>
<tr>
<td>LB1</td>
<td>Logan Campus</td>
<td>TBA</td>
</tr>
<tr>
<td>TB1</td>
<td>Tooele</td>
<td>TBA</td>
</tr>
<tr>
<td>UB1</td>
<td>Vernal</td>
<td>BEERC B133</td>
</tr>
<tr>
<td></td>
<td>Roosevelt</td>
<td>TBA</td>
</tr>
</tbody>
</table>

General Information
Instructor: Dr. Mike Christiansen (please just call me Mike)
Email: m.christiansen@usu.edu (please do NOT email me through Canvas; I don’t check it)
Office: 221G Bingham Building
Office hours: Tuesdays and Thursdays, 4–5 p.m.


Prerequisites: One of the following: Math ACT score of at least 25 or equivalent SAT Math score, AP Calculus AB score of 3 or higher, ALEKS Math score of 76 or higher, MATH 1050 or higher, or co-requisite of MATH 1050; High school chemistry recommended.

Course Description: First of a two-semester sequence, covering fundamentals of chemistry. Designed for science and engineering students.

Course Objectives:
By the end of the semester you should:

1. Understand the basic principles of general chemistry, as described above under Course Description.*
2. Be able to explain basic, everyday chemical phenomena and apply this knowledge to solving real-world problems.*,†
3. Be able to explain why chemistry is important and how it applies to everyday life.*

*IDEA objectives 1-2  †IDEA objective 3  ‡IDEA objective 7
Course Structure: This course is not an online class. However, in response to the global pandemic (see https://www.usu.edu/covid-19/index), various structural changes have been made.

To begin, this class does NOT follow a traditional-lecture format. Instead, lecture videos are pre-recorded and posted on Canvas. **Your assignment is to watch each chapter’s lecture video before class**, according to the schedule on Page 1 of this document. We will spend in-class time doing problem sets together (see Problem Sets below). This type of course structure, where you watch lecture videos online outside of class and then do “homework” in class, is called flipped learning. I flip my classes for the following reasons:

- Once students get used to it, most strongly prefer it to traditional lecture.
- It generally produces higher grades than traditional lecture.
- I get to know my students better, which means (when applicable) I can write better letters of recommendation for you later on.
- You can re-watch my videos as many times as you want, which can better help you prepare for our exams and (if applicable) entrance exams to professional schools later on.
- Because you do your problem sets in class, with me present, I am here to help answer your questions, right when you need me most.

To take the greatest advantage of the flipped learning videos outside of class, you must:

- Watch the videos BEFORE CLASS.
- Take notes and write down questions while you watch the videos.
- Do NOT do other activities (Facebook, listen to music, do your dishes) while watching the videos.
- Come to class. (Don’t skip, except in unavoidable emergencies.)

Attendance: I request that facilitators to track attendance and email me the final attendance record at the end of the semester. Attendance is not mandatory, but in-class problem sets are integral to the class, and we will work on problem sets during class. Thus, your grade will correlate strongly with your attendance. Additionally, if you ask me for letters of recommendation later on, I will take your attendance into serious consideration.

Canvas: Beyond videos, I will also post problem sets, lecture slides, overhead notes, answer keys, study guides, announcements, grades, and schedule changes on Canvas. Please check Canvas regularly!

Kaltura: In-class proceedings will be recorded with an app called Kaltura. You can access Kaltura through our Canvas homepage by clicking MEDIA GALLERY on the left panel, which will let you to re-watch anything you miss in class. However, please do NOT use this as an excuse to regularly skip class.

Time Expectations: Your primary homework is to watch the video lectures before class, to study for exams, and to prepare for in-class problem sets. If you want more practice, I’ve also posted (on Canvas) a list of Suggested Chapter Problems from our text, which are recommended but not required. Please note that chemistry is a subject that requires a large time commitment to master.

Video Quizzes: There will be a five-point quiz each week, based on material covered in each chapter’s videos (see the schedule on Page 1 above). These quizzes are given to encourage you to watch the lecture videos according to schedule. Your lowest quiz score will be dropped. Quizzes happen in class. However, in extenuating circumstances (such as a COVID infection), I will let you take quizzes online through Canvas, on an as-needed basis. Please just email me if and when that applies to you. No makeup quizzes will be given.
**Problem Sets:** Each chapter’s problem set is posted on that chapter’s Canvas page in advance. Most problem sets take more than one class period to finish. Due dates are posted at the top of each problem set and on our course schedule. Exams are based significantly on problem sets, so please work hard and ask me questions in class. Your lowest problem set score will be dropped. You may use any resource you want on problems sets, including your notes, textbook, the internet, me, and your classmates (as long as you maintain social distancing and other requirements spelled out at [https://www.usu.edu/covid-19/index](https://www.usu.edu/covid-19/index)). However, I warn against mindlessly copying answers. Doing so will only disadvantage you and lower your exam performance. You can email me your problem sets as you work on them (m.christiansen@usu.edu). I will then email you feedback with no grade punishment, as many times as you like, up until the problem set’s due date. If you hand in a problem set after its due date, it will be worth 50%. I will post problem set answer keys that include worked-out answer videos the morning after each problem set is due.

**Exams:** Most of your grade comes from exams (four midterms and one comprehensive final), which are based largely on problem sets. *Exams will be taken either in our testing centers or through Canvas, depending on university policy (information forthcoming).* Exams will cover information from our video lectures and/or class and will include modified problems from the text and/or problem sets. The comprehensive Final will have questions from old exams and quizzes, as well as new questions. Exams will be given on the days indicated on the class schedule above. If you know ahead of time that you will miss an exam, and if the reason is valid (determined at my discretion), arrangements will be made. No after-the-fact excuses/absences will be considered. For sound advice on how to prep for exams, please watch this: [https://www.youtube.com/watch?v=cX6qhAo0KhM&feature=youtu.be](https://www.youtube.com/watch?v=cX6qhAo0KhM&feature=youtu.be).

**Packback:** Before the pandemic, my students worked in groups. Current restrictions limit our ability to do this, so I’m testing out a social-media-like app called Packback ([https://questions.packback.co/login](https://questions.packback.co/login)). Your participation in Packback will be worth 5% of your total grade this semester (see “Grade Breakdown” below). For information on how to access and use Packback (you already paid for it in your course fees), please download and read the Packback.pdf document, which you can access from our course’s Canvas homepage. I will also post a video on Canvas about Packback soon.

**Grade Breakdown:**

Your course grade will be calculated, based on the following point amounts:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro Survey</td>
<td>5 points</td>
<td>(0.83%)</td>
</tr>
<tr>
<td>Packback Participation</td>
<td>30 points</td>
<td>(5.0%)</td>
</tr>
<tr>
<td>12 quizzes (5 points each – lowest score dropped)</td>
<td>55 points</td>
<td>(9.17%)</td>
</tr>
<tr>
<td>12 problem sets (10 points each – lowest score dropped)</td>
<td>110 points</td>
<td>(18.33%)</td>
</tr>
<tr>
<td>4 Midterm Exams (100 points each – lowest score dropped)</td>
<td>300 points</td>
<td>(50.0%)</td>
</tr>
<tr>
<td>Comprehensive Final (100 points, MANDATORY)</td>
<td>100 points</td>
<td>(16.67%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600 points</strong></td>
<td></td>
</tr>
</tbody>
</table>

Of the four midterm exams, **only three will be counted** toward your final grade. If you take all four midterms, your lowest score will be dropped. The comprehensive final is mandatory and will not be dropped. Your final course grade will be based on the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A:</td>
<td>100-93%</td>
</tr>
<tr>
<td>A–:</td>
<td>92-90%</td>
</tr>
<tr>
<td>B+:</td>
<td>89-87%</td>
</tr>
<tr>
<td>B:</td>
<td>86-83%</td>
</tr>
<tr>
<td>B–:</td>
<td>82-80%</td>
</tr>
<tr>
<td>C+:</td>
<td>79-77%</td>
</tr>
<tr>
<td>C:</td>
<td>76-73%</td>
</tr>
<tr>
<td>C–:</td>
<td>72-70%</td>
</tr>
<tr>
<td>D:</td>
<td>69-60%</td>
</tr>
<tr>
<td>F:</td>
<td>59% and below</td>
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</tbody>
</table>
University Policies

COVID-19 Classroom Protocols. In order to continue to provide various forms of face-to-face instruction at USU, and to limit the spread of COVID-19 during the pandemic, students are asked to follow certain classroom protocols during the fall 2020 semester. These protocols are based on CDC, state, and local health department guidelines and requirements are in place not only for your safety but also the safety of the entire campus community.

- Face coverings are required in all classrooms and teaching laboratories. Students will not be permitted to remain in class without a face covering, as per University Policy 20T.3. Students that do not adhere to the face covering policy will be referred to the Office of Vice President for Student Affairs for a possible violation of the Student Code of Conduct. There may be individual medical circumstances that prevent some students from using face coverings. If you require this exemption, contact the Disability Resource Center prior to the start of classes to investigate alternative instruction. These circumstances will be rare, but if they do exist, we ask that everyone be respectful.
- Follow faculty instructions regarding social distancing and entering/exiting classrooms.
- Stay home when you are sick, however mild your symptoms.
- Wash your hands frequently with soap and water.

Academic Freedom and Professional Responsibilities. Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. USU Policy 403 (accessible at http://www.usu.edu/hr/files/uploads/Policies/403.pdf) further defines academic freedom and professional responsibilities.

Academic Integrity – the “Honor System.” The University expects that students and faculty alike maintain the highest standards of academic honesty. The Code of Policies and Procedures for Students at Utah State University (accessible at https://studentconduct.usu.edu/studentcode) addresses academic integrity and honesty and notes the following:

- **Academic Integrity**: Students have a responsibility to promote academic integrity at the University by not participating in or facilitating others’ participation in any act of academic dishonesty and by reporting all violations or suspected violations of the Academic Integrity Standard to their instructors.
- **The Honor Pledge**: To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge: “I pledge, on my honor, to conduct myself with the foremost level of academic integrity.” Violations of the Academic Integrity Standard (academic violations) include, but are not limited to cheating, falsification, and plagiarism.

**Plagiarism.** Plagiarism includes knowingly “representing by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.” The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling.

Grievance Process. Students who feel they have been unfairly treated [in matters other than discipline, admission, residency, employment, traffic, and parking - which are addressed by procedures separate and independent from the Student Code] may file a grievance through the channels and procedures described in the Student Code: https://studentconduct.usu.edu/studentcode/article7.

Sexual Harassment. Utah State University is committed to creating and maintaining an environment free from acts of sexual misconduct and discrimination and to fostering respect and dignity for all members of the USU community. Title IX and USU Policy 339 (https://www.usu.edu/policies/339) address sexual harassment in the workplace and academic setting.

The university responds promptly upon learning of any form of possible discrimination or sexual misconduct. Any individual may contact USU’s Affirmative Action/Equal Opportunity (AA/EO) Office (http://aaeo.usu.edu) for available options and resources or clarification. The university has established a complaint procedure to handle all types of discrimination complaints, including sexual harassment (USU Policy 305, https://www.usu.edu/policies/305/), and has designated the AA/EO Director/Title IX Coordinator as the official responsible for receiving and investigating complaints of sexual harassment.

Students with Disabilities. USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) as early in the semester as possible (University Inn # 101, 435-797-2444, drc@usu.edu). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Withdrawal Policy and “I” Grade Policy. If a student does not attend a class during the first week of the term or by the second class meeting, whichever comes first, the instructor may submit a request to have the student dropped from the course. (This does not remove responsibility from the student to drop courses which they do not plan to attend.) Students who are dropped from courses will be notified by the Registrar’s Office through their preferred e-mail account.

Students may drop courses without notation on the permanent record through the first 20 percent of the class. If a student drops a course following the first 20 percent of the class, a W will be permanently affixed to the student’s record (check General Catalog for exact dates). Students with extenuating circumstances should refer to the policy regarding Complete Withdrawal from the University and the Incomplete (I) Grade policy in the General Catalog.

No-Test Days Policy. For classes that meet for a full semester, a five-day period designated as "no-test" days precedes final examinations. During this time, no major examinations, including final examinations will be given in order that students may concentrate on classwork, the completion of special assignments, writing projects, and other preparation for duly scheduled final examinations. Approved exceptions include final papers, weekly chapter quizzes, quizzes, projects, and examinations associated with a lab that does not meet during final examinations. This policy does not apply to classes that meet only during the second 7-week session of the semester or to classes offered during the summer term. Complete information related to Final Examination Policies (https://catalog.usu.edu/content.php?catoid=12&navoid=3311) can be reviewed in the General Catalog.

Assumption of Risk. All classes, programs, and extracurricular activities within the University involve some risk, and some involve travel. The University provides opportunities to participate in these programs on a voluntary basis. Therefore, students should not participate in them if they do not care to assume the risks. Students can ask the respective program leaders/sponsors about the possible risks a program may generate, and if students are not willing to assume the risks, they should not select that program. By voluntarily participating in classes, programs, and extracurricular activities, students do so at their own
risk. General information about University Risk Management policies, insurance coverage, vehicle use policies, and risk management forms can be found at [http://www.usu.edu/riskmgt/](http://www.usu.edu/riskmgt/).

**Mental Health.** Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS).

Students are also encouraged to download the “SafeUT App” to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.

I have read and understood the course syllabus, including Packback.pdf:

<table>
<thead>
<tr>
<th>Printed Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>