

Instructor	Email	Virtual Office Hours
Marci Moling	molingm@linnbenton.edu	Mondays 3-4 pm Wednesdays 2-3 pm Thursdays 8-9 pm **Other times by appointment

Lectures:

CRNs 40171 and 43275

Laboratory Instructor:

Clive Kittredge; kittrec@linnbenton.edu; CRNs 43657, 43658, and 43659.

Science Help Desk:

The Science Help Desk will be available via Zoom. More information regarding the Science Help Desk will be posted to Moodle.

Outcomes:

- Solve scientific problems with quantitative methods regarding rates of reactions, chemical equilibrium, thermodynamics, and electrochemistry.
- Apply chemical principles related to chemical kinetics, rates and mechanisms of chemical reactions, equilibrium, thermochemistry, and electrochemistry.
- Work safely in a laboratory environment while observing and accurately recording measurements related to chemical phenomena.

Prerequisites:

CH 222 with a C or better. Corequisite: CH 223L.

Required Materials:

Chemistry: The Molecular Nature of Matter and Change, 8th Ed., Silberberg

Chemistry 223 Lecture Manual

Knewton Alta online homework access

Non-graphing/non-programmable Scientific Calculator

****NOTE:** You should not have to pay for the textbook if you purchased access as a DDA for Chem 221. If you purchased Knewton for the year, then you do not need to purchase another access code. Access to the text and Knewton can be found on the course Moodle website.

Course Expectations:

Class will be asynchronous; it will **NOT** be live at the regularly scheduled class time. Therefore, I have certain expectations for this course:

1. Check your email and Moodle at least once a day.
2. Since we are not in a normal classroom setting, it is expected that each student will watch the lecture videos provided on Moodle. Since we are using a lecture manual, it is **HIGHLY** recommended that you attempt to work through the manual on your own before watching the videos. The answers will be

provided, but in this new learning environment it is not enough for you to just watch the videos, you need to be an active participant in your learning.

3. Keep up with the lecture schedule provided at the end of this syllabus.
4. Keep track of when materials are due/posted by checking the syllabus and/or Moodle.
5. You will upload quizzes and/or exams to Moodle. Different formats will be permitted, but it may be easiest for you to use a scanning app such as Google Drive or Adobe Scan. These apps allow you to take a picture of your document and save them as one PDF file.
6. Follow proper Zoom etiquette. We may not be face-to-face, but you should treat the experience as if you are face-to-face with myself and your fellow students. The following links may be helpful regarding Zoom etiquette and how to use Zoom.

<https://www.psychologytoday.com/us/blog/do-the-right-thing/202003/top-10-tips-good-zoom-hygiene-and-etiquette-in-education>

<https://atguides.humboldt.edu/m/zoom/l/752185-how-do-students-use-zoom>

<https://zoom.us/docs/doc/Student%20Tips%20for%20Participating%20in%20Online%20Learning.pdf>

Homework Problem Sets:

To succeed in chemistry, like learning a foreign language, you should study and practice every day. As material is covered you will find the problems are easier to work and not as time consuming as if they are attempted just before the due date. Keep in mind a typical science course takes **3-4 hrs of work per week outside of class for every credit hour**. Online homework will be assigned for each chapter. Homework will be completed using Knewton Alta through Moodle. Refer to the lecture schedule for homework due dates. Homework is due at 11:59 pm on the due date. Late homework will be accepted up to one week after the due date at a 15% deduction in points.

Instructions to Sign Up for Knewton Online Homework:

1. Log into Moodle and navigate to the course.
2. Click on any homework assignment to launch Knewton.

If you have issues with Knewton, you can use the feedback button, the online chat, or email support@knewton.com.

****Note:** If you had access to Knewton last year, you will not need to purchase another access code.

Quizzes:

Five quizzes will be given throughout the term (see the schedule for when quizzes will be posted and when they are due). These quizzes are considered “take-homes”, so you may work in groups remotely to complete them. Quizzes will reflect material from the previous lectures and any homework assigned. The quiz problems are good practice for exams and assist with keeping students up to date with material. **No make-up quizzes are given.** The lowest quiz score will be dropped. Quizzes will be turned in by uploading the completed quiz to a link provided in Moodle.

Exams:

An exam will be given after each chapter. The exams will be open for 24 hours. You should dedicate about 2.5 hours to complete the exams within the 24-hour window. The exams will consist of short answer, multiple choice, and/or true/false questions. Exams will be open note and open book. Each exam will contain an academic integrity statement that you will need to sign. You may print the exam and fill it out or write your answers on notebook paper. Then you will need to scan it and upload it to Moodle. If you miss an exam, you get one make-up exam. But it is your responsibility to coordinate rescheduling it with me. Any other missed exams will result in a 0.

Google Scan (Android only) or Adobe Scan (Android and iPhone) for submitting quizzes, exams, or lab reports.

To use Google Scan: On your Android device, Open the Google Drive App, click the + at the bottom right of the screen to Add an item, and Tap Scan (it may have a camera icon). Use your camera to take pictures, and the app will convert it to a PDF file.

To use Adobe Scan: On your device, download the Adobe Scan app. Open it and create an account. Use your camera to take pictures and the app will convert it to a PDF file.

If you have trouble uploading the PDF file from your phone to Moodle, try emailing it to yourself and use your desktop/laptop to upload the file.

Laboratory:

The following laboratory information will be posted to the CH 223L Moodle course page.

- A PDF file of each lab experiment.
- Pre-lab lecture videos.
- Video demonstrations of the experiment.
- Mock-up data.
- Links for uploading your pre-lab and lab report.

Due dates for the lab reports are in the lecture schedule. Late lab reports receive a 10% per day mark down. **You must receive at least 70% of the total lab points in order to pass the course regardless of passing the lecture. This is a lab class and in order to pass the course you must pass the laboratory component. Lab reports will not be accepted if they are turned in one week after their due date.**

Grading:

6 Exams	50%
5 Quizzes	15%
6 Knewton Homeworks	10%
Weekly Surveys	5%
1 Worksheets and 8 Lab Reports	20%

Course Grade:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
0-59%	F

An incomplete grade (I) may be given at the discretion of the instructor. However, a student must have a passing grade at the time an incomplete is assigned.

Drop/Withdraw Policy:

If you are withdrawing from the class, you must use WebRunner. If you formally drop the class **by Monday of the second week of the term**, you will receive a tuition refund. If you withdraw after the Monday of the second week of instruction through the seventh week a **'W'** will show up on your transcript. No withdrawals are allowed after the end of the seventh week. An instructor may not assign a "W" grade.

If you received financial aid or veteran's benefits, PLEASE talk with associates at the appropriate office to determine what effects on eligibility dropping a course will have. Don't jeopardize your eligibility!! You can contact the Financial Aid Office by calling (541) 917-4850 or emailing faoffice@linnbenton.edu.

If you stop attending the course without formally withdrawing you will continue to accumulate grades (zeroes for all assignments not turned in) and will receive the grade assigned by the instructor. You will also be held accountable for all charges on your account.

Academic Integrity:

"An instructor has the right to issue a grade of F for the course in which the instructor has reason to believe the student has cheated. A student has the right to appeal such action in accordance with the Students' Rights, Responsibilities and Conduct Policy." The preceding statement is Administrative Rule No. 7030-01.

Center for Accessibility Resources:

LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in this class, please contact your instructor as soon as possible to discuss your needs. If you think you may be eligible for accommodations but are not yet registered with CFAR, please visit the [CFAR Website](#) for steps on how to apply for services. Online course accommodations may be different than those for on-campus courses, so it is important that you make contact with CFAR as soon as possible.

LBCC Comprehensive Statement of Nondiscrimination:

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, and use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules.

Lecture and Lab Schedule:

****Note: This schedule of topics, homework due dates, and exam dates is subject to change.**

	Mon.	Wed.	Fri.	Laboratory	Lab Report Due Dates	Homework
Week 1 4/6-4/10	Syllabus and 16.1-16.2	16.2-16.4	16.4-16.5	Review Worksheet		
Week 2 4/13-4/17	16.5-16.7 Quiz 1 posted	17.1-17.2 Quiz 1 Due	Exam 1 (Ch 16)	Iodine Clock	Review Worksheet Due Mon (4/13)	<i>Ch 16 Knewton Due Wed (4/15) at 11:59 pm</i>
Week 3 4/20-4/24	17.3-17.4	17.5	17.6, 18.1 Quiz 2 posted	Le Chatelier's Principle	Iodine Clock Report Due Mon (4/20)	<i>Ch 17 Knewton Due Sat (4/25) at 11:59 pm</i>
Week 4 4/27-5/1	18.2, 18.3, 18.9, 18.5 Quiz 2 Due	18.4, 18.6, 18.7	Exam 2 (Ch 17)	Acid-Base Properties of Salt Solutions	Le Chatelier's Report Due Mon (4/27)	
Week 5 5/4-5/8	18.7, 19.1 Quiz 3 posted	19.1 Quiz 3 Due	Exam 3 (Ch 18)	Titration of a Polyprotic Acid	Acid-Base Report Due Mon (5/4)	<i>Ch 18 Knewton Due Wed (5/6) at 11:59 pm</i>
Week 6 5/11-5/15	19.2	19.2	19.3	Titration of a Polyprotic Base	Polyprotic Acid Report Due Mon (5/11)	
Week 7 5/18-5/22	19.3-19.4 Quiz 4 posted	20.1 Quiz 4 Due	Exam 4 (Ch 19)	Solubility Product Constant	Polyprotic Base Report Due Mon (5/18)	<i>Ch 19 Knewton Due Wed (5/20) at 11:59 pm</i>
Week 8 5/25-5/29	Holiday No Class	20.2	20.3	Solubility and Thermodynamics	Solubility Product Report Due Mon (5/25)	<i>Ch 20 Knewton Due Sat (5/30) at 11:59 pm</i>
Week 9 6/1-6/5	20.4 Quiz 5 posted	21.1-21.2 Quiz 5 Due	Exam 5 (Ch 20)	Electrochemical Cells	Solubility and Thermo Report Due Mon (6/1)	
Week 10 6/8-6/12	21.2-21.3	21.3-21.4	Exam 6 (Ch 21)	No Lab	Electrochemical Cells Report Due Mon (6/8)	<i>Ch 21 Knewton Due Thurs (6/11) at 11:59 pm</i>