

CH221 General Chemistry 1 (5 credits) Fall 2020

Chemistry 221 Zoom Lecture

CRN	Live Zoom Lecture	Instructor
24183	Monday 9:30-10:20 am	Beth Manhat manhatb@linnbenton.edu
24184	Monday 11:00-11:50 am	
24182	Monday 12:30-1:20 pm	

- Each CRN will meet Mondays for as listed above – you are expected to attend the CRN in which you are enrolled. We will discuss weekly information. I will also work through targeted problems and provide practice for students to complete.
- Videos of chapter lectures will be posted on Moodle. I expect that you will watch these videos and take notes as you would in a face-to-face class. Other resources will be shared for you.


Chemistry 221 On Campus Lab – MH 214 *You will attend every other week*

CRN	Lab Day/Time	Instructor
26680	Tuesday 8:00 - 10:20 am – MH 214	Dylan Fast fastd@linnbenton.edu
26681	Tuesday 11:00 - 1:20 pm – MH 214	
26682	Tuesday 2:00 - 4:20 pm – MH 214	Beth Manhat manhatb@linnbenton.edu
26683	Thursday 8:00 - 10:20 am – MH 214	David Rogow rogowd@linnbenton.edu
26684	Thursday 11:00 - 1:20 pm – MH 214	
26685	Thursday 2:00 - 4:20 pm – MH 214	

- To meet social distance requirements, a maximum of 10 students enrolled in each CRN can attend per week - this means you will attend lab on campus 4 times. Partitions have been constructed in the labs. Goggles will be provided. Masks will be required for on lab meetings.
- Expect communication from your lab instructor about when YOU will attend lab. See additional lab information in the section below.

Dr. Manhat's Lecture Zoom Office Hours				
Monday	Tuesday	Wednesday	Thursday	Friday
3:00-4:00pm	5:00-6:00pm	10:00-11:00am	2:00-3:00pm	none

- I am available for weekly scheduled Zoom office hours (links on Moodle).
- I will help you with any concepts, problems, or provide additional examples to solve together.
- Other times are available, email to schedule alternative zoom session.
- Your lab instructor may provide zoom hours. They are also available via email.

 **Check your Linn-Benton email daily.** Weekly pacing guides will be emailed. I check email often but please allow reasonable times for responses. Please use your CRN and appropriate subjects for convenience since we will email often!



All lecture and lab items will be posted and submitted via Moodle. Moodle is our online platform and you can access it [here](#), through My LBCC. Lecture notes, lecture Videos, homework, labs, exams, and quizzes will be available on Moodle.

Prerequisites: MTH 095 and one of the following: a passing score on the chemistry entrance exam; CH 150 with a grade of “C” or better; CH 121 with a grade of “C” or better; CH 112 with a grade of “C” or better. **Corequisite:** CH221L, MTH111.

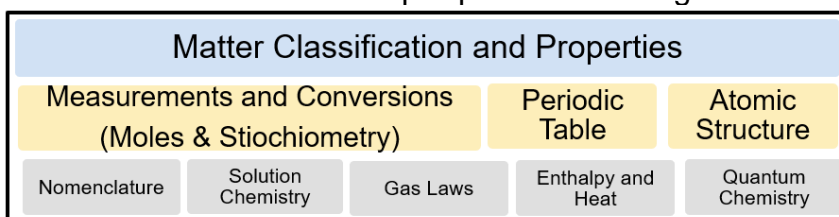


Class Participation: It is imperative to maintain a safe learning environment with unconditional respect. Engage with the videos, HW, textbook, lab materials, & each other.

Work Groups: Each student has been assigned to a Work Group with other students. The goal of the Work Groups is to create class community and to provide each of you with a support network beyond the instructors. During Monday's Zoom lecture, you will be placed with your Work Group in break out rooms. Additionally, your Work Group is required to touch base minimally 1x per week beyond lecture. You can communicate through Zoom, text, email, Google Meetings, LBCC's [Discord](#) page in #general-chemistry or Study Rooms, or other. One person from each work group each week needs to make one post on the Work Group discussion board on Moodle. More will be discussed on Monday.



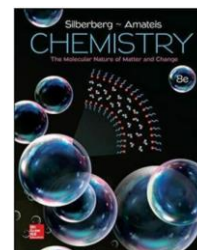
Course Description: This is the 1st in a 3-course sequence. This course is recommended for chemistry and other natural science and pre-professional degree seekers. We will cover:



Workload Expectation: Most students earning an "A" work about 4 hrs/week for every credit hour. They often read the text (or other resource), review lecture materials, practice problems, do homework assignments, and complete lab assignments on time.

Instructional Materials:

1. Chemistry: The Molecular Nature of Matter and Change, 9th or 8th Ed., Silberberg
The textbook is a Digital Direct Access (**DDA**) text and is included in your tuition unless you opt-out. The textbook can be found on the course Moodle site.
2. Knewton Alta online HW access (44.95\$/yr if you did NOT take CH150 at LBCC).
Access can be found on the course Moodle site.
3. A bound carbonless copy notebook for lab.
4. Any Scientific Calculator: You need a calculator for practice problems and to complete quizzes or exams. You can use Google calculator, but I do not recommend it.
5. Download & familiarize yourself with Zoom App (phone or computer)



Assessment Criteria and Methods of Evaluation:

Tentative Grade Distribution:

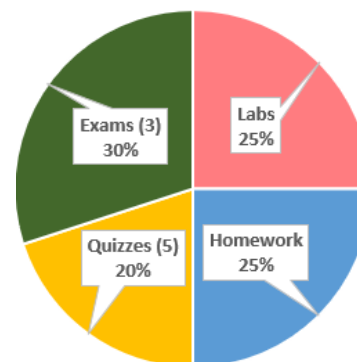
Please note that this course is NOT graded on a curve.

Earned grades are defined as:

A = 90% – 100% B = 80% – 89% C = 70% – 79%

D = 60% – 69% F = below 59%

An incomplete (IN) may be assigned with instructor discretion AND only at a time in which the student is passing.



[LBCC Grading Guidelines](#)

<https://linnbenton.smartcatalogiq.com/en/current/Catalog/Academic-Information-and-Regulations>

Homework Online (25% total):

- To succeed in chemistry, consider studying and practicing most days.
- Most practice problem homework will be via Knewton, an online homework platform.
- Each individual assignment, listed in the chapter on Moodle, is due at 11:59 pm.
- All HW assignments count towards your grade. Each assignment is 100 points.
- Late work is accepted with a 15% deduction and can be submitted up to 30 days late. The last day to submit Knewton HW is the night before the final exam.
- Non-Knewton HW will be assigned throughout the term with specified due dates.

Quizzes (20% total):

- Quizzes are designed to help students keep up with material and evaluates where you are on important concepts prior to the exam.
- There will be 6 quizzes hosted on Moodle from 5pm Thursday – 7pm Friday. Please dedicate a **45 mins** to complete each quiz within the time it is open.
- The top 5 quizzes will count towards your grade.

Exams (30% total):

- Exams cover specified topics using multiple choice & short answers questions.
- Practice exams with answers will be provided on Moodle.
- There will be 3 exams hosted on Moodle. The midterms will be held 5pm Thursday – 7pm Friday. The final is based on finals schedule of finals week. Please dedicate **130 mins** to complete exam within the time it is open.
- Quizzes and exams are open notes and open book. Each assessment contains an academic integrity policy in accordance with LBCC that will require acknowledgement. **If cheating is suspected, it will result in a 0 (in accordance with LBCC policy).**

Make-Up Quizzes and Exams: Missed assessments result in a 0. You can contact me to coordinate a make-up if you miss a scheduled quiz or exam within 1 week of the original date. You will need to provide work for questions requiring math step or explanations to be eligible for partial credit. This can be typed or into the space provided in Moodle or complete your work on scratch paper and submit it. You can submit a photo (.jpeg) or .pdf of your work.

Labs (25% total)

- Labs this term have 2 type of labs:
 - In-person labs: To accommodate social distancing, only 10 students max. may attend a given lab meeting. Each student will complete 4 in person labs this term with a week off between each on campus meeting.
 - Virtual labs: Between in-person labs, online simulations or data work up be used
- Each week's lab documents will be posted on Moodle.
- All labs include weekly write-ups, with a Pre-lab and Post-lab write-up. **Complete the pre-lab before the time of lab and watch any Pre-lab videos prior to attending the in-person lab or accessing virtual data.**
- All lab write-ups in-person and virtual labs will be submitted to the corresponding drop box on Moodle and are due within a week of the date they are assigned.
 - Late labs will be accepted 1 week beyond the due date with a 2-point deduction.
 - Labs may be accepted after 1 week for half credit.
 - Not turning in a lab receives a zero.
- Passing CH221 requires passing the laboratory section with a $\geq 70\%$.

Student Learning Outcomes:

1. Differentiate the historical developments leading to the the development of the atomic theory and the Periodic Table.

2. Solve scientific problems with quantitative methods using dimensional analysis and/or algebra regarding unit conversions, stoichiometry, gas laws, and thermochemistry.

3. Apply chemical principles associated with chemical and physical changes and properties of matter, nomenclature, chemical reactions, thermochemistry, the kinetic theory of a gas, and quantum theory.

4. Work safely in a laboratory environment while observing and accurately recording measurements related to chemical phenomena



Course Content and Outcome Guide:

<http://linnbenton.smartcatalogiq.com/current/Catalog/Courses/CH-Chemistry/200/CH-221>

LBCC Comprehensive Statement of Nondiscrimination: LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, 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 BP-1015](#). Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public_report

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.



Student Code of Conduct/ Rights and Responsibilities:

<https://www.linnbenton.edu/current-students/administration-information/policies/students-rights-responsibilities-and-conduct.php>

Drop/Withdraw Policy:

- If you are withdrawing from class, you must file a Schedule Change Form with Registration or use WebRunner. To receive a tuition refund, drop the class by the 2nd Monday of the term. To withdraw from the class, drop the class by the end of the 7th week of the term. The course will record as a “W” on your transcript.
- If you stop attending the course and DO NOT formally withdraw, you will accumulate zeroes for assignments not turned in and receive the grade in accordance with work completed.
- If you received financial aid or veteran’s benefits, talk with associates at the appropriate office to determine what effects on eligibility dropping a course will have. You can contact the Financial Aid Office by calling (541) 917-4850 in Takena Hall.

Center for Accessibility Resources:

You should contact your instructor during the first week of class if:

1. You have a documented disability and need accommodations.
2. Your instructor needs to know medical information about you.
3. You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources Online Services web page every term to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR website at www.linnbenton.edu/cfar for steps on how to apply for services or call 541-917- 4789.

CH221 Fall 2020 Tentative Online Schedule

Drop Date: 10/05/20

Withdraw Date: 11/15/20

Week	Lecture Material Quiz/Exam –Thur-Fri Final Exam – Tues-Wed	Lab Materials Prelab-Write up due: 1 hr before lab time Post-Lab Write up due: lab time next week	Homework Knewton HW due Wed 11:59 pm
1 9/29 - 10/04	Chapter 1 – 1.1, 1.3, 1.4, 1.5 Chapter 2 – 2.1, 2.9	Group A – Safety*, Lab Format, Lab 1 Density Group B – Lab 2 Graphing Tutorial and Sig Figs	Video Introduction to your Work Group Due Fri 10/02
2 10/05 - 10/11	Chapter 2 – 2.2, 2.3, 2.4, 2.5, 2.6, 2.7 Quiz 1 Thurs, 10/08 5pm – Fri,10/09 7pm	Group A – Lab 2 Graphing Tutorial and Sig Figs Group B – Safety*, Lab Format, Lab 1 Density	Diversity History Assignment Due Fri 10/09 CH 1 Knewton Due Wed 10/07
3 10/12 - 10/18	Chapter 3 – 3.1, 3.2, 3.3, 3.4 Quiz 2 Thurs, 10/15 5pm – Fri,10/16 7pm	Group A – Lab 3 Moles Group B – Lab 4 Hydrate	CH 2(a) Knewton Due Wed 10/14
4 10/19- 10/25	Chapter 3 – 3.4 Chapter 4 – 4.1, 4.3 Exam 1 Thurs, 10/22 5pm – Fri,10/23 7pm	Group A – Lab 4 Hydrate + Nomenclature Group B – Lab 3 Moles	CH 2(b) Knewton CH 3(a) Knewton Due Wed 10/21
5 10/26 - 11/01	Chapter 4 – 4.4, 4.2, 4.5, 4.6 Quiz 3 Thurs, 10/29 5pm – Fri,10/30 7pm	Group A – Lab 5 Titrations Group B – Lab 6 Reactions	CH 3(b) Knewton CH 4 (a) Knewton Due Wed 10/28
6 11/02- 11/08	Chapter 4 – cont. Chapter 5 – 5.1, 5.2, 5.5 Quiz 4 Thurs, 11/05 5pm – Fri,11/06 7pm	Group A – Lab 6 Reactions Group B – Lab 5 Titrations	CH4(b) Knewton Due Wed 11/04
7 11/09- 11/15	Chapter 5 – 5.3, 5.4, 5.6 Chapter 6 – 6.1 Exam 2 Thurs, 11/12 5pm – Fri,11/13 7pm	Group A – Lab 7 Thermodynamics Group B – Lab 8 Gas Law	CH 5(a) Knewton Due Wed 11/11
8 11/16- 11/22	Chapter 6 – 6.2, 6.3, 6.4, 6.5 Quiz 5 Thurs, 11/19 5pm – Fri,11/20 7pm	Group A – Lab 8 Gas Law Group B – Lab 7 Thermodynamics	CH 5(b) Knewton Due Wed 11/18
9 11/23- 11/29	Chapter 6 – 6.6 Chapter 7 – 7.1, 7.2 NO Quiz	No Labs	CH 6(a) Knewton Due Wed 11/25
10 11/30- 12/06	Chapter 7 – 7.2, 7.3, 7.4 Quiz 6 Thurs, 12/03 5pm – Fri,12/04 7pm	Group A & B - Lab 9 Atomic Spectra Extra Credit CH221 Review	CH 6(b) Knewton Due Wed 12/02
11 12/07- 12/12	 Exam 3 (Final) Tues, 12/08 5pm – Wedn,12/09 7pm	No in-person lab meeting Last lab submission: lab time	CH 7 all Due Wed 12/07 * Late Knewton Due Fri 12/09

Flexibility Statement: The instructor reserves the right to modify course content and/or substitute assignments and learning activities in response to institutional, weather or class situations.

Some Lab Safety items are due AT your first lab meeting. See communication from lab instructors.