

Chemistry 150—Preparatory Chemistry, Summer 2021 (CRN 13681)

Instructor: Omid Sadeghi, Ph.D. **E-mail:** sadegho@linnbenton.edu

Instructor Website: My instructor website can be found here: [Sadeghi, Omid](#)

Zoom meeting time: Tuesdays 1:00 – 1:50 pm

Instructor office hour: Friday 1:00 – 1:50 pm

Lecture: Online/remote learning; all activities are on the course Moodle site and Zoom

Course Description: Introduction to chemistry for science, engineering and the professional health occupations. Designed to meet the prerequisite for CH 221, this fast-moving curriculum covers the basic tools offered in a typical one-year high school chemistry course. A good selection for students who need a refresher in chemistry or have little or no background in chemistry and need to meet the prerequisite for CH 221. Topics emphasized include chemical calculations and problem-solving techniques encountered in both inorganic and organic chemistry. There is no laboratory with CH 150. Chemistry 150 *does not* fulfill the general education science course requirement.

Required Materials: [OpenStax Chemistry 2e Textbook](#), Digital ISBN 1947172093
Knewton Alta Online Homework Access Code
Non-graphing/programmable Scientific Calculator

Calculator Policy: Students will be required to use a non-graphing/programmable scientific calculator for quizzes and/or exams. Department approved calculators are: TI 30xa, TI 30X IIs, Casio fx-260, or HP 10s. If a student does not wish to purchase one of these calculators the department will provide either a Casio fx-260 or HP 10s for use on exams and/or quizzes.

Corequisite: Math 95, Intermediate Algebra

Course Format:

Class will be synchronous and asynchronous. We will meet one day each week for a live Zoom session that will be used to answer questions and allow you to work in groups. The lecture will be asynchronous, meaning you will watch lecture videos during the week on your own time.

Student Learning Outcomes:

1. Use mathematical reasoning with dimensional analysis while applying rules of significant figures.
2. Use the Periodic Table to recognize and explain; (a) the differences between, (b) the formation of, and (c) the naming of covalent and ionic compounds.
3. Explain the relationships and perform calculations using moles, individual particles, and mass.
4. Balance chemical reactions and perform stoichiometric calculations in problem solving.

5. Perform calculations using a variety of concentrations such as mass percent and molarity in connection with solution stoichiometry.

Student Help Desk: The Student Help Desk assists students with most computer software-related issues and other technology problems or questions, from login problems related to LBCC's online systems to questions about course-related instructional software. The Student Help Desk is now remote! Contact info can be found [here](#)

Science Help Desk: If you need help in any physics or chemistry course, you should "drop by" the Physical Science Desk, now offered online! The Help Desk is staffed approximately 20 hours per week. Please visit the [Science Help Desk web page](#) for details and hours.

Math support: If you need help in math, visit this [page](#)

Tutoring: In case you have never heard, LBCC has a tutoring program. Visit [Tutoring Program web page](#) for more information

Textbook: Good news! Your textbook for this class is available for free online! If you prefer, you can also get a print version at a very low cost. Your book is available in web view and PDF for free. You can also choose to purchase on iBooks or get a print version via the campus bookstore or from OpenStax on Amazon.com. You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.) Chemistry from OpenStax, Print ISBN 194717262X, Digital ISBN 1947172611, <https://openstax.org/details/books/chemistry-2e>

Homework Problem Sets:

Online homework will be assigned for each chapter. Homework will be completed using the Knewton Alta platform through the course Moodle site. Refer to the schedule for homework due dates. Homework is due at 11:59 pm on the due date. **No late homework will be accepted.**

Instructions to Sign Up for Knewton Alta online homework:

1. Log-on to Moodle and navigate to the course site.
2. Click on any homework assignment activity (green puzzle icons) to launch Knewton.
3. Click **Purchase** and then choose **One-Time Purchase** or **Redeem Access Code**. The access codes are also available at the bookstore. Students pay \$44 for 2 years of access. There is also an option to get courtesy access for 14-days.

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

Worksheets:

Students will be given worksheets during the Zoom sessions. You will be assigned to different groups and will work on the worksheets collaboratively as a group. Talking about the problems with other students will help all of you understand them better. Note that the students must

have some accountability for their individual learning in order for groups to work effectively. The instructor will monitor student's performance and make sure all the group members are actively participating in the discussions. The worksheet problems are good practice for exams and assist with keeping students up-to-date with material. You will upload your worksheet to Moodle by the end of the day that worksheet was provided. **No late or make-up worksheets will be given.**

Exams:

All exams this term will be taken online in the Moodle course site. There are 4 exams (please see course schedule for details) and there is no final exam. Students must complete the exam within the given time window.

Grading/Point Distribution:

| Assignments | Percentage |
|---------------------------|-------------------|
| Knewton Homework | 15% |
| Worksheets and attendance | 25% |
| Exams 4 @ 15% each | 60% |
| Total | 100% |

Course Grade:

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

An incomplete grade (IN) may be given at the discretion of the instructor. However, a student must have a passing grade ($\geq 70\%$) at the time an incomplete is assigned.

Drop/Withdraw Policy: If a student wishes to withdraw from the class, a Schedule Change Form will need to be filed with Registration or using WebRunner. If a student formally drops the class **by Monday of the second week of the term**, that student will receive a full refund of tuition. If a withdrawal is filed after the Monday of the second week of instruction through the seventh week, a 'W' will show up on the student's transcript. No withdrawals are allowed after the end of the seventh week. An instructor may not assign a "W" grade.

Students receiving financial aid and/or veteran's benefits should speak with the associates at the appropriate office to determine what effects on eligibility dropping a course will have. Don't jeopardize your eligibility! The Financial Aid Office can be reached at (541) 917-4850, and the Financial Aid Office can be found in Takena Hall.

If a student stops attending the course without formally withdrawing, that student will continue to accumulate grades (zeroes for all assignments not turned in) and will receive the grade

assigned by the instructor based on the cumulative score for all assignments. Students will be held accountable for all charges on their accounts if a withdrawal is not filed.

How To Be Successful In This Class:

- Attend all weekly Zoom meetings.
- Be prepared for meetings by watching the videos and reading/working through the textbook chapters to be covered in class (see Schedule, page 6) before that meeting. Make sure you check the weekly To-Do list on Moodle.
- Review the syllabus and learn policies and procedures for this class.
- Attempt all assignments. If you struggle with an assignment, visit the Science Help Desk, or go to office hours.
- When studying for exams, try to work through problems on your own before looking at the solutions
- Check your LBCC email regularly, and make sure that Moodle announcements are sent to your email.
- Understand your rights and responsibilities as a student and as a class member.
- Learn how to ask clarifying questions and how to be a coach for your classmates.
- When confused, challenged, frustrated or having an “aha” moment, visit the instructor during their office hours.
- You will upload worksheets and exams to Moodle. Different formats will be permitted, but it may be easiest for you to use the Moodle app or a scanning app such as Google Drive or Adobe Scan. These apps (Google Drive and Adobe Scan) allow you to take a picture of your document and save them as one PDF file. You can then upload your file to Moodle.
- 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>

Course Evaluations: Student feedback is important to improve this course and to help the instructor know how to adjust teaching methods. Student feedback is taken seriously and does impact future versions of the course. The Student Evaluations of Teaching (SET's) are anonymous and will be done the 8th or 9th week of class, in class. The process takes approximately 10 minutes and it is highly encouraged to take this opportunity to provide constructive feedback on the class. Thank you in advance for your input!

Center for Accessibility Resources: You should meet with 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 in order to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR website at <http://www.linnbenton.edu/cfar> for steps on how to apply for services or call 541-917-4789.

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. Please see the College policy on Students’ Rights Responsibilities and Conduct: <https://www.linnbenton.edu/about-lbcc/administration/policies/board-policies-and-administrative-rules/7000-series-student-services/ar-7030-01.php>

Students Rights, Responsibilities, and Conduct Policy: LBCC students have rights: the right to free speech, the right to assemble, the right of a free press, etc. LBCC students also have responsibilities to their community: the responsibility to participate and engage in class, the responsibility to advocate for their needs (ask for help), the responsibility to support a respectful teaching and learning environment, the responsibility to treat all persons with respect, the responsibility to be truthful and honest in all work and communications, and the responsibility to follow staff directions, local, state, and federal laws. Rights and responsibilities balance together to create the best learning environment. For example, while you have free speech in the café or courtyard, in class the instructor decides whose turn it is to talk and what the topics for conversation will be. Students are free to believe what they believe, but instructors may require students to learn and recite concepts, principles, or theories for a class even if the student does not believe those concepts. You play a role in creating a positive community at LBCC. Please review your rights and responsibilities at this link: <https://www.linnbenton.edu/about-lbcc/administration/policies/student-rights-responsibilities-and-conduct.php>

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 1015](#).

Course Schedule

| Week No. dates | Lecture Videos | Tuesday Zoom Meetings | Assessments |
|--------------------------|---------------------------------|--|---|
| 1 6/28-7/2 | 1.1-1.4 | Syllabus and Intro | |
| 2 7/5-7/9 | 1.5-1.6 & 2.3 | CH 1 Worksheet | CH 1 Worksheet (Due 7/6) CH. 1 Knewton HW (Due 7/9) Exam 1 (CH-1) (Available 7/9-7/11) |
| 3 7/12-7/16 | 2.3-2.5 | Review | |
| 4 7/19-7/23 | 2.6-2.7 | CH 2 Worksheet part1 | CH 2 Worksheet part 1 (Due 7/20) CH. 2 Knewton HW (Due 7/23) |
| 5 7/26-7/30 | 7.3 & 3.1 | CH 2 Worksheet Part 2 | CH 2 Worksheet part 2 (Due 7/27) CH.7.3 Knewton HW (Due 7/30) Exam-2 (CH-2 & 7.3) (Available 7/30-8/1) |
| 6 8/2-8/6 | 3.2-3.3 | Review | |
| 7 8/9-8/13 | 3.3-3.4 | CH 3 Worksheet | CH 3 Worksheet (Due 8/10) CH. 3 Knewton HW (Due 8/13) Exam 3 (CH-3) (Available 8/13-7/15) |
| 8 8/16-8/20 | 4.1-4.3 | Review | |
| 9 8/23-8/27 | 4.4-4.5 | CH 4 Worksheet | CH 4 Worksheet (Due 8/24) CH. 4 Knewton HW (Due 8/27) |
| 10 8/30-9/3 | No Video | No Class | Exam 4 (CH-4) (Available 8/30-9/1) |

****Note:** This schedule of topics, homework due dates, and exam dates is tentative, and subject to change at the instructor's discretion. Online homework due dates are in *italics* and are to be completed at 11:59 pm on that date.