

**Chemistry 150—Preparatory Chemistry, Fall 2021 (24171)****Instructor:** David L. Rogow, Ph.D.**E-mail:** [rogowd@linnbenton.edu](mailto:rogowd@linnbenton.edu)**Instructor Website:** <https://cf.linnbenton.edu/mathsci/physci/rogowd/web.cfm?pgID=9501>**Class Meetings:** Tues. 10:00 – 11:20 am (via Zoom)**Office Hours:** Wed. 11:00 am – 12:00 (via 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](#)  
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

**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.

**Science Help Desk:** The Science Help Desk is located on the first floor of Madrone Hall in the atrium area. The Help Desk is staffed approximately 20 hours per week. Hours of the Help Desk are posted throughout Madrone Hall and in the Help Desk area. The Science Help Desk is now remote: <https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/science-support.php>

**Attendance and Classroom Expectations:** This term has been transitioned to online/distance learning. All class materials, including notes/handouts, worksheets, videos, reading assignments, online homework assignments, quizzes, exams, will be posted on the course Moodle site. Class meetings and office hours will occur as Zoom meetings, which will be accessible from a link on the course Moodle site.

**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](mailto:support@knewton.com).

#### **Quizzes:**

Students will take weekly quizzes online in the Moodle course site. The quizzes have a time limit which will be shown when students click on the quiz. Students must complete the quiz within the given time window, and on the day of the quiz. The lowest quiz score will be dropped at the end of the term. The quiz problems are good practice for exams and assist with keeping students up-to-date with material. **No late or make-up quizzes will be given.**

#### **Exams:**

All exams this term will be taken online in the Moodle course site. The exams have a time limit which will be shown when students click on the exam. Students must complete the exam within the given time window, and on the day of the exam.

**Grading/Point Distribution:**

<b>Assignments</b>	<b>Points</b>
Homework: 4 @ 10 pts. each	40 pts.
Quizzes: (# of points varies)	~50 pts.
Midterm Exams 4 @ 50 pts. each	200 pts.
<b>Total</b>	<b>290 pts.</b>

**Course Grade:**

<b>Percentage</b>	<b>Letter Grade</b>
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 ( $\geq 70\%$ ) 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 classes.
- Be prepared for class by reading/working through the textbook chapters to be covered in class (see Schedule, page 5) before that class. Classroom experiences will be much richer for you when you have made an effort to work through the material before it is worked in class.
- Challenge your own taken-for-granted notions *and* let the instructor challenge them as well.
- Review the syllabus and learn policies and procedures for this class.
- 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.
- Be engaged and work from your stretch zone. You will get out of this class what you put into it.

**In-Class Expectations:** It is expected that all students will be involved in the class. This includes being present, asking questions and participating in discussions. Students should always come to class prepared by having read and worked through the relevant sections of the textbook outlined in the schedule on pg. 5 of the syllabus. No grade will be assigned for attendance in lecture, but to do well in this course it is expected that students will attend ALL class meetings. If a situation arises that makes it necessary to miss a class, it is the student’s responsibility to obtain notes from a peer. Every student is expected to be respectful of all students in the class, in word as well as behavior. Along these lines, turn off all cell phones before and during class and put it away so as to avoid causing a distraction. If a student needs to leave class for any reason, please do so quietly.

**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 8<sup>th</sup> or 9<sup>th</sup> 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.

**Course Schedule:** The schedule below includes a tentative list of textbook sections to be covered, along with the *homework due dates* and **dates of exams**.

<b>Week No.</b> dates	<b>Textbook Chapters (sections)</b>	<b>Exams (Thurs. &amp; Fri.)</b> <b>Homework Due (Wed. 11:59 pm)</b>
<b>1</b> 9/27-10/1	Syllabus & Chapter 1 (1.1-1.5)	
<b>2</b> 10/4-10/8	Chapter 1 (1.5-1.6) Chapter 2 (2.1)	
<b>3</b> 10/11-10/15	Chapter 2 (2.2-2.6)	<b>Exam-1 (CH-1)</b> <i>HW Set 1 Due Wednesday 10/13</i>
<b>4</b> 10/18-10/22	Chapter 2 (2.6-2.7)	
<b>5</b> 10/25-10/29	Lewis Structures, Chapter 7 (7.3) Chapter 3 (3.1)	
<b>6</b> 11/1-11/5	Chapter 3 (3.2-3.3)	<b>Exam-2 (CH-2 &amp; Lewis Structures)</b> <i>HW Set 2 Due Wednesday 11/3</i>
<b>7</b> 11/8-11/12	Chapter 3 (3.3-3.4)	
<b>8</b> 11/15-11/19	Chapter 4 (4.1-4.2)	<b>Exam-3 (CH-3)</b> <i>HW Set 3 Due Wednesday 11/17</i>
<b>9</b> 11/22-11/26	Chapter 4 (4.2-4.4)	
<b>10</b> 11/29-12/3	Chapter 4 (4.4-4.5)	<i>HW Set 4 Due Wednesday 12/1</i>
<b>11</b> 12/6-12/10	Finals Week	<b>Exam-4 (CH-4)</b>

**\*\*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.

**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/student-rights-responsibilities-and-conduct.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 P1015 in our [Board Policies and Administrative Rules](#)