

Chemistry 150—Preparatory Chemistry, Winter 2018 (32118)

Instructor: David L. Rogow, Ph.D. **E-mail:** rogowd@linnbenton.edu

Instructor Website: Go to [the LBCC homepage](#), click “QuickLinks”, click “Instructor Website”, then click [Rogow, David](#)

Office: MH-212 **Office Hours:** Tues. 1:00 - 2:50 pm, & Thurs. 2:00 - 3:50 pm

Lecture: Tu/Th 10:00 - 11:20 am, in Madrone Hall, Room 208 (MH-208)

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: Preparatory Chemistry Manual, by Dr. Bridgid Backus
Sapling 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.

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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.

Attendance and Classroom Expectations: Class attendance is very important for the learning of chemistry. Students are expected to attend class regularly and on time. Students should avoid entering the classroom late or leaving before the class ends, as it is distracting to students and instructors. Students are required to turn off their cell phones during class periods. **If a student needs to use a cell phone (call or text) they are expected to leave the classroom to do so.**

Course Material Structure: There are six units in the Chemistry 150 Course Manual. Exams will be given at the conclusion of units I, II, III, IV, & V. Material from unit VI will be included on the final exam, which is comprehensive (covers material from the entire term). Some material from an upcoming unit may be introduced during the lecture prior to an exam (material that will not be included on the exam). Since the course manual is conducive to independent study, working ahead is not only possible, but strongly encouraged. All students are expected to read and work through as much of the relevant sections of the course manual as possible before attending class.

Homework, Quizzes and Exams: Online homework will be assigned for each unit. See the lecture schedule (and Sapling website) for homework due dates. In addition to the online homework, the course manual contains practice problems for each unit, and example exams, which students should use as practice for upcoming quizzes and exams. To ensure success in chemistry,

homework should be done on a daily basis. Working on the assignments at the same time, or just after material is covered in class, will help you master problem-solving methods and will make homework more manageable. Working in study groups is often beneficial, however, students will need to understand how to do the problems individually, and *practice* them before quizzes and exams, since these are timed. All exams and quizzes are given in class; a periodic table will be provided for all exams and quizzes.

Absence/Make-up Policy: Students who have conflicts with exam days due to other College sanctioned events/functions, illness, or family emergencies must contact the instructor **prior** to the exam. Official documentation of the College function, illness and/or family emergency must be provided in order to schedule a make-up exam. Quizzes cannot be taken at any other time than when given in-class. “My alarm did not go off” or “My car would not start” are not valid excuses. Leave early and have a plan B. Getting to class on-time is the responsibility of every student who chooses to take part in an adult learning environment.

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Grading/Point

Distribution:

Assignments Points Homework: 5 best @ 10 pts. each 50 pts. Quizzes: ~50 pts. Exams 5 @ 50 pts. each 250 pts. Final Exam 150 pts. **Total 500 pts.**

Course Grade: Percentage Letter 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 ($\geq 70\%$) 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. Financial Aid can be reached at (541) 917-4850, and is 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 Course Manual units to be covered in class (see Lecture 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.
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- 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 course manual 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 (quizzes are not announced). 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 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.

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

Week No. Tuesday Thursday

1 1/8-12

Syllabus & Unit 1A-D Unit 1E-G

2 1/15-19

Unit 1H-K & Unit 2A,B *Unit 1 HW Due Wed. (1/17)*

Exam 1 (Unit 1) Unit 2B,C

3 1/22-26 Unit 2C,D Unit 2D-G &

Unit 3A,B 4 1/29-2/2

Unit 3B-E *Unit 2 HW Due Tues. (1/30)*

Exam 2 (Unit 2) Unit 3F 5 2/5-9

Unit 3G & Unit 4A,B Unit 4B,C 6 2/12-16

Unit 4D *Unit 3 HW Due Tues. (2/13)*

Exam 3 (Unit 3) Unit 4E 7 2/19-23 Unit 4E Unit 4F,G

8 2/26-3/2

Unit 4G & 5A,B *Unit 4 HW Due Tues. (2/27)*

Exam 4 (Unit 4) Unit 5B,C 9 3/5-9 Unit 5D-F Unit 6A,B

Unit 5 HW Due Thurs. (3/8)

10 3/12-16 Unit 6C-D

Exam 5 (Unit 5) Unit 6E,F *Unit 6 HW Due Fri. (3/16)* 11 3/19-23

Final Exam 9:30-11:20 am Happy Spring Break! **Note: This schedule of topics, homework due dates, and exam dates is tentative, and subject to change at the instructor's discretion. Sapling homework due dates are in *italics* and are to be completed before 10 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/current-students/administration-information/policies/students-rights-responsibilities-and-conduct>

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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: <http://www.linnbenton.edu/go/studentrights>

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](#)

Request for Special Needs or Accommodations: Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

1. Go to saplinglearning.com and click on the **Higher Ed** option for your country at the top right. 2. Log in with your existing account or click **Create an Account**. If you have a

Facebook account, you can use it to quickly create a Sapling Learning account. Click Create my account through Facebook. You will be prompted to log into Facebook if you aren't already. Choose a username and password, then click Link Account. Otherwise, supply the requested information and click Create My Account. Check your email (and spam filter) for a message from Sapling Learning and click on the link provided in that email. If you don't get the email within 30 minutes, contact support@saplinglearning.com. 3. Look for the gray bar entitled **Enroll in a new course**. 4. Click on your subject to expand the menu. 5. Click on the term to expand the menu further (**note** that Semester 1 refers to the first course in a sequence and not necessarily the first term of the school year). 6. Once the menus are fully expanded, you'll see a link to a specific course. If

this is indeed the course you'd like to register for, click the link. Otherwise, continue expanding the other menus until you locate the correct link and click it.

7. Enter your zip code and pay if necessary. Most courses require payment using a credit card, a PayPal account, or an **Access Card Code** (<http://www2.saplinglearning.com/help/how-do-i-enter-code-my-scratch-card>) from a scratch-off card purchased at your bookstore. In some cases, you may have additional options to [enter the course for free for x days](#), to use your [Sapling Learning credit.](#), or to buy [multiple items for a bulk discount](#).

When you return from paying, you will be enrolled in your course. If your credit card is not accepted, it may help to create a PayPal account, store your credit card info there, then use the PayPal option to pay for Sapling Learning. Once you have registered and enrolled, you can log in at any time to complete or review your homework assignments. If you have any problems, send an email to support@saplinglearning.com explaining your issue.

The Sapling Learning support team is almost always faster and better able to resolve issues than your instructor.

