# **Chemistry 150 – Preparatory Chemistry Summer 2019 – CRN 13681**

**Instructor**: Omid Sadeghi **Email**: [sadegho@linnbenton.edu](mailto:sadegho@linnbenton.edu)

**Office**: MH-211 **Office** **Hours**: M 10:00 – 11:00 am

**Lecture**: Monday 9:00-9:50 am & Wednesday 9:00 – 10:50 pm in 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. There is no laboratory with CH 150. Chemistry 150 does not fulfill the general education science course requirement.

## **Required Materials:**

* [Chemistry from OpenStax](https://openstax.org/details/books/chemistry?Book%20details), Print ISBN 1938168399, Digital ISBN 1947172093
* Knewton’s Alta Online Homework Access Code
* Non-graphing/programmable Scientific Calculator

**Calculator Policy:** Students will be required to use a nongraphing/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

**OpenStax Chemistry Book**:

The textbook for this class is available for free online at [www.openstax.org/details/chemistry](http://www.openstax.org/details/chemistry). The book is available in web view and PDF for free. If you prefer, you can also get a print version. There are several copies of the print version available at the library on reserve. You can also choose to purchase on iBooks or get a print version from OpenStax on Amazon.com. You can use whichever formats you want, but web view is recommended. If you buy on Amazon, make sure to use the link on the book page on openstax.org to get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

**Online Homework Problem Sets**:

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

**Instructions to Sign Up for Knewton**:

1. Log into Moodle and navigate to the course.
2. Click on any homework assignment to launch Knewton.
3. Click **Purchase** and then choose **One-Time Purchase** or **Redeem Access Code**. The access codes are available at the bookstore. 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).

**Paper Homework Problem Sets**:

Students will be given 10 paper homework assignments. These assignments will be handed out during the class period before they are due and also posted to moodle. Paper homework is designed to help students review and practice class material. The completed hard copy must be turned in by the start of the class in which it is due. Late paper homework or emailed copies of the paper homework will not be accepted. The two lowest paper homework scores will be dropped.

**Exams**:

All exams are given in class. Students who have conflicts with exam days due to other College functions, illness, or family emergencies must contact the instructor **prior** to the exam. Documentation of the College function, illness and/or family emergency must be provided to schedule a make-up exam.

**Grading:**

| 3 Exams (50 pts each) | 150 pts |
| --- | --- |
| Final Exam | 100 pts |
| Paper Homework | 40 pts |
| Online Homework | 40 pts |
| Total | 330 pts |

## **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 (≥70 %) at the time an incomplete is assigned.

**Drop/Withdraw Policy:**

If you are withdrawing from the class you must file a Schedule Change Form with Registration or 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 by visiting the Financial Aid Office in Takena Hall.

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.

**How to Be Successful in this Course**:

* Attend class every day. Arrive on time and stay for the entire class.
* Follow along with lecture instead of looking at other material during class.
* When given time to solve problems during class, at least attempt to solve the problems.
* Work with the other students at your table to solve problems. Talking about the problems with other students will help all of you understand them better.
* Attempt all assignments. If you struggle with an assignment, you can ask other students in the class, 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. Redo the lecture problems, redo the paper homework problems, and work through the sample exam problems.
* Check your LBCC email regularly, and make sure that Moodle announcements are sent to your email.
* When sending emails to the instructor, write the topic in the subject line, and include your full name, class number (CH150), and class days.

**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:**

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 www.linnbenton.edu/cfar for steps on how to apply for services or call 541-917- 4789.

**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](https://www.linnbenton.edu/faculty-and-staff/administrative-information/policies/board-policies-and-administrative-rules/1000-series-the-college/board-policy-series-number-1050-equal-opportunity-statement.php). 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](http://linnbenton-advocate.symplicity.com/public_report)

**Lecture Schedule:**

Note: This schedule of topics, homework due dates, and exam dates are subject to change. Knewton homework is due at 11:59 pm on the due date.

| Week Number | Monday | Wednesday | Online  Homework |
| --- | --- | --- | --- |
| **1**  6/24 – 6/28 | Syllabus  1.1, 1.2 | 1.3, 1.4, 1.5 |  |
| **2**  7/1 – 7/5 | 1.5  *Paper HW 1 Due* | 1.6, 2.1 | Ch. 1 Online HW Due Sunday (7/11) |
| **3**  7/8 – 7/12 | 2.2, 2.3  *Paper HW 2 Due* | **Exam 1 (Ch. 1)**  2.3, 2.4, 2.5 |  |
| **4**  7/15 – 7/19 | 2.6  *Paper HW 3 Due* | 2.7 | Ch. 2 Online HW Due Sunday (7/21) |
| **5**  7/22 – 7/26 | 7.3  *Paper HW 4 Due* | **Exam 2 (Ch. 2 & 7.3)**  3.1 |  |
| **6**  7/29 – 8/2 | 3.1  *Paper HW 5 Due* | 3.2 |  |
| **7**  8/5 – 8/9 | 3.3  *Paper HW 6 Due* | 3.4, 4.1 | Ch. 3 Online HW Due Sunday (8/4) |
| **8**  8/12 – 8/16 | 4.2  *Paper HW 7 Due* | **Exam 3 (Ch. 3)**  4.3 |  |
| **9**  8/19 – 8/23 | 4.4  *Paper HW 8 Due* | 4.5  *Paper HW 9 Due* | Ch. 4 Online HW Due Sunday (8/25) |
| **10**  8/26 – 8/30 | Review for Final  *Paper HW 10 Due* | **Final Exam**  **9:00 – 10:50 am** |  |