Chemistry 222: General Chemistry, Winter 2019

Instructor: Michelle Wiley **Email**: wileym@linnbenton.edu

Office: MH-212 **Office Hours**: MW 11:00 – 11:50 pm; TR 10:00 – 10:50 pm

Lectures: CRN 31783: Mon, Wed 9:30 - 10:50 am; Fri 10:00 – 10:50 am in MH-208
CRN 31780: Mon, Wed 12:30 - 1:50 pm; Fri 1:00 – 1:50 pm in MH-208

Laboratory:

Clive Kittredge	kittrec@linnbenton.edu	Tues and Thurs 8:00 am in MH-214
Nelly Donis	donisn@linnbenton.edu	Tues 11:00 am and 2:00 pm in MH-214

Science Help Desk:
The Science Help Desk is located on the first floor of Madrone Hall in the atrium area. The Help Desk is manned approximately 20 hours per week. Hours of the Help Desk are posted throughout Madrone Hall and in the Help Desk area.

Outcomes:

- Solve scientific problems with quantitative methods regarding electromagnetic radiation, chemical bonding, phase changes, and colligative properties.
- Apply chemical principles related to quantum mechanics, atomic and molecular orbital theory, periodic trends, intermolecular attractions of pure substances and solutions, covalent bond theory, and organic chemistry.
- Work safely in a laboratory environment while observing and accurately recording measurements related to chemical phenomena.

Minimum Requirements:
CH 221 General Chemistry with a grade of "C" or better and MTH 111 College Algebra with a grade of "C" or better. Corequisite: CH 222L General Chemistry Lab.

Required Materials:

- *Chemistry: The Molecular Nature of Matter and Change,* 7th or 8th Ed., Silberberg
- Knewton's Alta online homework access
- Carbonless Lab Notebook
- Non-graphing/non-programmable Scientific Calculator

Optional Materials:
Lab coat
Personal Safety Goggles

Calculator Policy:
Students will be required to use a non-graphing/non-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 a calculator for use on exams and/or quizzes.

Attendance and Classroom Decorum:
Class attendance is very important to the learning of chemistry. Students are expected to attend class regularly and on time. Entering the classroom late or leaving before the class ends is distracting to students and your instructor. **There is NO cell phone use in the classroom allowed.** The use of a laptop computer during lecture class is approved for CH 222 lecture material **only, i.e. lecture is not a time to do homework**.

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 11:59 pm 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.

Quizzes:
Students will be given unannounced quizzes. They may be in-class or take-home quizzes. The lowest quiz score will be dropped. 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 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.

Laboratory Manual:
The laboratory manual will be available on Moodle. Be sure to check the syllabus for which lab is assigned for a particular week. Before each lab you are expected to read through the assigned lab, prepare your lab notebook, and possibly answer prelab questions. You will not be allowed to use the lab manual during lab, so you do not need to print it out. More details about the lab manual and lab notebook will be covered in lab.

Laboratory Reports:
Lab reports are due at the beginning of YOUR next lab session after the completion of the experiment (unless otherwise noted in the schedule). Late lab reports receive a 10% per day mark down. Your lowest lab report score will be dropped. **You must receive at least 70% of the total lab points to pass the course regardless of passing the lecture.** No make-up labs will be given. **Late lab reports will not be accepted** (and will be counted as a zero) if they are turned in one week past the due date. Also, **if you miss more than three labs or turn in fewer than five reports you will not receive a passing grade for the course.** This is a lab class, and to pass the course you must pass the laboratory component.

Prelab Questions:
Most lab experiments described in the manual have prelab questions. Many of these questions are designed to emulate the laboratory experiment that is about to be performed. By answering these questions BEFORE the lab period, students are able to understand and perform the experiment more effectively. Prelab questions should be done on separate sheets of paper and are due **within the first 5 minutes** of the lab period. The prelab assignments are worth from one to five points of the lab report grade. **No late prelabs are accepted.**

Grading:

4 Exams (75 pts. each)	300 pts
Final Exam	150 pts
Quizzes	60 pts
7 Homework Sets (10 pts. each)	70 pts
8 Lab Reports (20 pts. each)	160 pts
Lab Final Exam	50 pts
Total	790 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 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.

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. 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

Lecture and Lab 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	Monday	Wednesday	Friday	Laboratory
1 1/7 – 1/11	Syllabus 8.1	8.2	8.3	Safety, Review
2 1/14 – 1/18	8.4	9.1, 9.2 *Ch 8 HW Due*	**Exam 1** **(Ch 8)**	Exp. 1 Periodic Trends
3 1/21 – 1/25	**No Class**	9.3, 9.4	9.5	Exp. 2 Qualitative Analysis of Cations
4 1/28 – 2/1	10.1, 10.2 *Ch 9 HW Due*	10.3, 11.1	11.2 *Ch 10 HW Due*	Exp. 3 Lewis Structures
5 2/4 – 2/8	11.3	12.1 *Ch 11 HW Due*	**Exam 2** **(Ch 9, 10, 11)**	Exp. 4 Molecular Modeling
6 2/11 – 2/15	12.2	12.3	12.4	Exp. 5 Candy Chromatography
7 2/18 – 2/22	**No Class**	12.5 *Ch 12 HW Due*	**Exam 3** **(Ch 12)**	Exp. 6 Enthalpy of Vaporization of Water
8 2/25 – 3/1	13.1, 13.2	13.3	13.4	Exp. 7 Freezing Point Depression
9 3/4 – 3/8	13.5	13.6 *Ch 13 HW Due*	**Exam 4** **(Ch 13)**	Exp. 8 Organic Structures and Nomenclature
10 3/11 – 3/15	15.1, 15.2	15.3	15.4 *Ch 15 HW Due*	Lab Final
11 3/18 – 3/22 **Finals**	9:30 am class: **10 – 11:50 am** 12:30 pm class: **1 - 2:50 pm**			