Linn-Benton Community College

Chemistry 221
General Chemistry

Fall 2019

Lecture:

Instructor/Office/Email	Lecture Days/Time	Location	Office Hours
Beth Manhat MH-212 manhatb@linnbenton.edu	MW 9:30-10:50 am and F 10:00-10:50 am & MW 12:30-1:50 pm and F 1:00-1:50 pm	MH-208	TBD
Marci Moling MH-210 molingm@linnbenton.edu	MW 11:00 am-12:20 pm and F 11:00-11:50 am	MH-208	TBD

Laboratory:

Instructor	Email	Lab Day/Time	Location
David Rogow	rogowd@linnbenton.edu	T 8:00, 11:00, or 2:00	MH-214
Clive Kittredge	kittrec@linnbenton.edu	R 8:00 or 11:00	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 in the Help Desk area.

Outcomes:

- Differentiate the historical developments leading to the development of the atomic theory and the Periodic Table.
- Solve scientific problems with quantitative methods using dimensional analysis and/or algebra regarding unit conversions, stoichiometry, gas laws, and thermochemistry.
- Apply chemical principles associated with chemical and physical changes and properties of matter, nomenclature, chemical reactions, thermochemistry, the kinetic theory of a gas, and quantum theory.
- Work safely in a laboratory environment while observing and accurately recording measurements related to chemical phenomena.

Minimum Requirements:
MTH 095 and any one of the following: a passing score on the chemistry entrance exam, or CH 150 with a grade of "C" or better, or CH 121 with a grade of "C" or better, or CH 112 with a grade of "C" or better. **Corequisite:** MTH 111.

Required Materials:

Chemistry: The Molecular Nature of Matter and Change, 8th Ed., Silberberg
Chemistry 221 Lab Manual
Knewton Alta online homework access
Carbonless Lab Notebook
Non-graphing/non-programmable Scientific Calculator

**NOTE: The textbook is a DDA and is included in your tuition unless you opt-out. Access to the text can be found on the course Moodle website.

Optional Materials: 1. Lab coat 2. 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 either a Casio fx-260 or HP 10s 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 221 lecture material **only, i.e. lecture is not a time to do homework**.

Homework Problem Sets: To succeed in chemistry, like learning a foreign language, you should study and practice every day. As material is covered you will find the problems are easier to work and not as time consuming as if they are attempted just before the due date. Keep in mind a typical science course takes **3-4 hrs of work per week outside of class for every credit hour**. Online homework will be assigned for each chapter. Homework will be completed using Knewton 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 Online Homework:

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.
**Note: If you had access to Knewton last year, you will not need to purchase another access code.

Quizzes: Six quizzes will be given throughout the term (see the schedule for when quizzes will be administered). Quizzes will reflect material from the previous lectures and any homework assigned. The quiz problems are good practice for exams and assist with keeping students up-to-date with material. **No make-up quizzes are given.** The lowest quiz score 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.

Laboratory Reports: Lab reports are due at the beginning of YOUR next lab session after the completion of the experiment. Late lab reports receive a 10% per day mark down. Your lowest lab score will be dropped. **You must receive at least 70% of the total lab points in order to pass the course regardless of passing the lecture. No make-up labs will be given. Lab reports will not be accepted if they are turned in one week after their 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 in order 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:

3 Exams	40%
Final Exam	20%
6 Quizzes	10%
Knewton Homework	10%
1 Worksheet and 6 Lab Reports	20%

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 P1015 in our Board Policies and Administrative Rules.

Lecture and Lab Schedule:

****Note:** **This schedule of topics, homework due dates, and exam dates are subject to change.**

Week No.	Mon.	Wed.	Fri.	Laboratory	Homework
Week 1 9/30-10/4	Syllabus 1.1	1.1,1.4 **Quiz 1**	2.1	Safety, Lab Format, Sig Fig Review, Naming Review	
Week 2 10/7-10/11	2.2-2.4	2.4-2.7	2.7 **Quiz 2**	Expt. 1: Are All Crayons Created Equal?	*Ch 1 Knewton Due Sun (10/6)*
Week 3 10/14-10/18	3.1-3.2	**Exam 1 (Ch 1 & 2)**	3.2	Expt. 2: The Formula of a Hydrate	*Ch 2 Knewton Due Sun (10/13)*
Week 4 10/21-10/25	3.3-3.4	3.4 **Quiz 3**	4.1	Expt. 3: Identification of Household Chemicals	
Week 5 10/28-11/1	4.4 & 4.2- 4.3	4.2-4.3, 4.5	4.5 **Quiz 4**	Expt. 4: Generic vs. Name Brand Vinegars	*Ch 3 Knewton Due Sun (10/27)*
Week 6 11/4-11/8	5.1-5.3	**Exam 2 (Ch 3 & 4)**	5.3	Expt. 5: Chemical Reactions	*Ch 4 Knewton Due Sun (11/3)*
Week 7 11/11-11/15	**Holiday No Class**	5.4-5.5	5.6 **Quiz 5**	Expt. 6: The Gas Constant	
Week 8 11/18-11/22	6.1-6.3	6.3	6.4-6.5	Expt. 8: Hess's Law	*Ch 5 Knewton Due Sun (11/17)*
Week 9 11/25-11/29	6.5-6.6	**Exam 3 (Ch 5 & 6)**	**Holiday No Class**	No Lab	*Ch 6 Knewton Due Mon (11/25)*
Week 10 12/2-12/6	7.1-7.2	7.2-7.3 **Quiz 6**	7.4	Review Worksheet	*Ch 7 Knewton Due Sat (12/7)*
Week 11 12/9-12/13	M. Moling (10-11:50)	B. Manhat (10-11:50) B. Manhat (1-2:50)			