

CH 242 Syllabus Winter 2017

Course: Chemistry 242, Organic Chemistry

Instructor: Bridgid Backus, Ph.D.

Office: MH 209 **Phone:** (541) 917-4625

Office Hours: MWF: 10:00–11:00

E-mail: backusb@linnbenton.edu

Lecture: MW 8:00 in MH 208

Laboratory: Thursday, MH 213 @ 8:00, 11:00 or 2:00

Outcomes:

- Work safely in a laboratory environment while observing and accurately recording measurements related to chemical phenomena.
- Apply organic chemical principles and theories as they relate to alkyl halides, alkenes, and alkynes.
- Determine the chemical reaction type (substitution, elimination, addition, and radical), illustrate its mechanisms, and determine the products.
- Analyze IR, NMRs, and Mass Spectroscopy data as they relate to structure.

Minimum Requirements: Completion of CH 241 with a grade of C or better.

Required Materials:

- Organic Chemistry, 9th ed. By Solomons & Fryhle
- The Organic Chem Lab Survival Manual by James Zubrick
- CH 242 Organic Chemistry Manual
- Carbonless Lab Notebook
- Access Code for Sapling

Optional Materials: Lab Coat, Molecular Model Kit (Very Helpful)

Lecture & Lab Schedule:

Week	Lecture Material	Laboratory
1	ChemModule 6	Safety Lecture ChemModule 6 and ChemModule 9 IR Computer Tutorial (Before coming to lab Read textbook pp 83-92 AND ChemModule 9, Model 1)
2	Monday (no Class) ChemModule 7 Sapling HW #1 Due	Lecture ChemModule 7 and IR Computers (Before coming to lab complete ChemModule 9, Model 2)

Week	Lecture Material	Laboratory
3	Exam I (Chap 6) ChemModule 7	Limonene Lab And IR Computers
4	ChemModule 7 and ChemModule 8 Sapling HW #2 Due	Complete Limonene Lab and begin HNMR Tutorial
5	ChemModule 8 & 9 Sapling HW #3 Due	Complete HNMR tutorial and begin CNMR tutorial Limonene Lab Due Peer Review Assignments
6	ChemModule 9 Exam II (Chap 7 & 8)	IR Lab Due Complete CNMR tutorial Peer Review Due
7	Monday: no class ChemModule 9 Sapling HW #5 Due	MS tutorial NMR Lab Due
8	ChemModule 9 Sapling HW #6 Due	MS Computers Final Limonene Lab Due
9	ChemModule 10	Exam III MS Lab Due
10	ChemModule 10	Alkenes from Alcohols
11	Cumulative Final exam Wed.	Alkenes from Alcohols lab due Open Study Session

Note: Final Exam Time: 8:00-2:00 in lab. Students may start any time after 8:00 am but must be finished by 2:00 pm.

****This schedule is subject to change****

Success in Organic Chemistry: Organic Chemistry is a challenging as well as exciting course of study. The successful student will; (1) attend class regularly (2) read text material BEFORE coming to class (3) contribute significantly in collaborative groups (4) work homework problems associated with daily lecture material each day (5) work more problems than are assigned by the instructor (6) study for exams by reviewing material and REWORKING problems.

Attendance: Class attendance is very important in the learning of chemistry. Students are expected to attend class regularly and **on time**. Entering the classroom is distracting not only for your peers, but also for the instructor. It is just as distracting to leave class early. If you have to leave class early, please sit near the door to limit any distractions.

Homework: There are three types of homework assignments. **The first type is to read your textbook and work slightly ahead in the ChemManual. The second type is the online Sapling Homework. The third type is to work the problems at the end of each section of the ChemManual.** Keys are posted in the file cabinet for the end of

section homework. Homework should be done on a daily basis. As material is covered you will find the problems are easier to work and not as time consuming as saving them for just prior to an exam.

Laboratory Exercises: Labs are due at the beginning of the following lab period in which they are completed with the exception of the last lab which is due Friday before finals week. Late labs receive a 10% per day mark down. Late labs are not accepted after 1 week from the due date. No make-up experiments will be given. **Note: If you miss or do not turn in more than three labs you will not receive a passing grade for the course. This is a lab class and in order to receive credit for the course you must be passing the laboratory component.**

There are five laboratory exercises/labs for this term. The majority of the laboratory work involves using the computer programs for instrumentation. One point will be assessed for each of these hours for participation and working with the software. These lab periods will be counted as a lab exercise in instrumentation for a 20 point total. Note: You must be in class working with the software to receive these points for this assignment.

Graded Classwork: A quiz will be given each day reflecting the material of the previous class and/or homework problems described above. **No make-up quizzes will be given.** Two lowest quizzes will be dropped.

Exams: No exams will be dropped. No make-up exams will be given without a doctor's excuse and notification of the instructor BEFORE the exam.

Extra Credit: Your two lowest quiz scores to be dropped will be given as extra credit. In addition, if you attend all of the computer labs for the full time period 2 extra credit points will be allotted.

Grading:

Graded Item	Points	Total Points
Exam I	35	35
Exam II	65	65
Exam III	100	100
Final Exam	150	150
12 Quizzes	5 each	60 (approximate)
6 Online Homework	10 each	60
5 Experiments	20 each	100
Peer Review	5	5
6 Computer Labs	3 each	18 + 2 extra if all complete
		590 (approximate)

Course Grade: A, 90 – 100 %; B, 80 –89 %; C, 70 –79 %; D, 60 -69%; F, 0 – 59 %
I - An incomplete may be given at the discretion of the instructor. However, a student must have a passing grade at the time of an incomplete being assigned.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, and use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.(for further information to this website: [Linn-Benton Community College](http://po.linnbenton.edu/BPsandARs/) <http://po.linnbenton.edu/BPsandARs/>)

Center for Accessibility Resources:

You should meet with your instructor during the first week of class if

- You have a documented disability and need accommodations,
- Your instructor needs to know medical information about you, or
- You need special arrangements in the event of an emergency.

If you believe you may need accommodation services, please contact the Center for Accessibility Resources (541) 917-4789. 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.

Statements of Inclusion

The LBCC community is enriched by diversity. Each individual has worth and makes contributions to create that diversity at the college. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. (related to Board Policy #1015)

Academic Integrity: “An instructor has the right to issue a grade of “F” for the course in which the instructor believes the student has cheated. A student has the right to appeal such action in accordance with the Student Rights, Freedoms, Responsibilities and Due Process Policy.” The preceding is an excerpt from the LBCC Statement of Academic Rules and Regulations.

Sapling Learning - Organic Chemistry Question Sets

Sapling's chemistry questions are delivered in a web browser to provide real-time grading, response-specific coaching, improvement of problem-solving skills, and detailed answer explanations. Dynamic answer modules enable one to interact with 3D models and figures, utilize drag-and-drop synthetic routes, and draw chemical structures - including stereochemistry and curved arrows. Altogether, Sapling is cheaper than a tutor, provides more value than a solutions manual, and goes beyond a mere assessment exercise to give a learning experience.

STUDENT INSTRUCTIONS

Go to the [Sapling Learning home page](#) and click **US Higher Ed** to log in or create an account. The following link includes detailed instructions on how to register for your course:

[Sapling Online Homework https://community.macmillan.com/docs/DOC-5972-sapling-learning-registering-for-courses.](https://community.macmillan.com/docs/DOC-5972-sapling-learning-registering-for-courses)

During sign up or throughout the term, if you have any technical problems or grading issues, please contact Tech Support via the [Students Support Community](#). Their response times are generally under 24 hours.