CHEM 230 – Organic Chemistry for the Life Sciences
Syllabus: Summer 2026

Instructor: Dr. Sabina Maskey
Office: FB415
Office Hours: MWF (11:15 am -12:15 pm)
Additional hours available by appointment made at least 48 hrs. in advance via email or in person.

Meeting Days/Time: MWF 9:15am – 10:45 am, FB 103

Methods to Contact Me

1. **Email:** sabina.maskey@bsu.edu *(Please allow 24 hours for response. I occasionally check my email in the evening, but I typically will respond during normal business hours.)*
2. **Chemistry Office Mailbox:** FB 417

Purpose of the Course: CHEM 230 is a one-term sophomore level service course which focuses on the structure and reactivity of organic compounds. Functional groups commonly seen in the context of biochemistry will be particularly investigated. This course consolidates the fundamental principles of organic chemistry with less depth than the CHEM 231/232 two-term organic sequence and will prepare students for the one-term CHEM 360 (Essentials of Biochemistry) course. Special attention will be paid to biologically relevant examples and applications throughout the course.

As a student in CHEM230, we will expect that you have a good grasp of the material covered in CHEM111 and CHEM112, including Lewis's acid/base theory, an understanding of molecular and electronic three-dimensional shapes and intermolecular forces, including identifying polar bonds and molecules. I encourage all students to make an appointment to meet with me virtually if you need more help reviewing prior material.

Texts and Other Materials

- Paula Yurkanis Bruice, *Essential Organic Chemistry, 3rd Edition*, Pearson, 2016 (Second edition or e-book options are both acceptable options)
- Paula Yurkanis Bruice, Study Guide and Solution Manual for Essential Organic Chemistry, 3rd Edition, Pearson, 2016
- https://www.pearson.com/store/en-us/pearsonplus/p/9780137533268.html (Rental option)
- Free Animated and 3-D Chemical Compound Drawing software MolView http://molview.org/
- Any Organic Chemistry Molecular Model Set (suggested)
    - You will be allowed to use this on your exams if you have.

Expected Time Commitment

For each one credit hour within a course, you will spend approximately two to three hours outside of class studying. Therefore, to help determine the course load most appropriate for you, use the formula:

3 credit hours (1 course) = 50 minutes in class per day + 140 – 185 minutes outside class study time per day = ~22.5 hours per week time commitment.

Homework: There will be **Homework Problem Sets** for each Chapters due after the completion of the chapter. In addition, there will be also be Worksheets to be completed during the Lab. Also, you should work on as many of the textbook problems in the textbook as you can find time for; the best ones to try are listed in the chapter objectives.

Exams: There will be three exams and a final exam.

Tentative exam schedule (any changes to these exam dates will be announced in class.):

	Date		Expected Coverage
Exam #1	Wednesday May 20th		Chapters 1, Resonance, 2, 3
Exam #2	Thursday	May 28th	Chapters 4. 5, 8, +6
Exam #3	Friday	June 5th	Chapters 7,9, +11
Final Exam* (cumulative)	Friday	June 12th	All Chapters including 12,13

Grading: A student is required to take all exams in order to pass class.

Exam #1	100 pts.	A	93-100 %	C-	67-69%
Exam #2	100 pts.	A-	90-92 %	D+	64-67%
Exam #3	100 pts.	B+	86-89 %	D	61-63 %
Quizzes	Scaled to 100 pts.	B	82-85 %	D-	55-60%
HW Problem Sets	Scaled to 100 pts.	B-	79-81%	F	< 55 %
Final Exam	200 pts.	C+	74-78%		
Total	700 pts.	C	70-73 %		

Quiz will be in class every day- There is no make-up for Missed Quizzes. Each Quiz is 10 points.

Attendance: Students attendance is not required, but is expected and **very important**, as guided by university policy. However, attendance is vital for success, as shown by past student performance. Failure to attend all classes, work all practice problem sheets, and exams can and most likely will lower your grade. **Remember: Summer Classes are very fast paced!**

Course Materials

Course materials, including lecture slides, problem set worksheets, and all answer keys/answer key presentations will be posted on the BSU Canvas website for this course for all to use. I would ask that everyone please ensure that they have access to this website as early as possible in the course.

How to Succeed in this Class

This will likely be one of most challenging courses you have taken so far. Due to its condensed nature, it will move very fast. Each chapter will build upon earlier material, so it is crucial to not fall behind. Otherwise, the material will start to accumulate with time, and it will be hard to catch up. Here is some advice to help you succeed in this course:

1. Have a positive attitude
2. Ask questions and work on problems
3. Keep up with the material being discussed in class
4. Do not be afraid to ask/answer questions even when unsure. Wrong answers to my questions are usually more productive for everyone than correct answers
5. Work a lot of problems. Work them before reading the answers.
6. Do not try to work problems in your head. Keep a paper and pencil handy while studying. Draw the structures of the molecules and write the mechanisms.
7. Get help with the concepts early. If you do not understand some topic in the lecture, talk to me as soon as possible.
8. Work problems *as you learn* the subject and refer to your book or notes *as often as needed* to complete the problems.
9. When "re-studying" the material in preparation for a quiz or exam, try to answer the problems without looking at the answer key

Note: You will not be successful in this class using only memorization as a strategy. This will mostly likely result in a score of around 50% on exams and quizzes.

Most people learn best by doing, not memorizing. The best way to learn organic chemistry is to work through problems and figure out the answers, not by memorizing what you see. **Organic chemistry is a cumulative course; the concepts you learn at the beginning of the course will be built on throughout the semester. It is in your best interest not to get behind - otherwise the course will become overwhelming.**

Although all students are expected to read the textbook chapters in full, we will focus most heavily on the topics highlighted lectures and problem sets each week. The chapters should be read to reinforce and complement the class work. It is highly recommended that students work through as many of the study problems within each chapter as well as additional problems at the end of each chapter. Working through these problems will aid in understanding the material and to help you prepare for the in-class problems, quizzes, and examinations.

Reconsideration of Grades

It is possible that errors will be made in grading the exams or assignments (we are all human!), and that a reconsideration of a grade may be justified. **Please don't hesitate to bring any potential error to my attention**. Errors in addition on papers will (of course) be corrected where appropriate. Where you believe an error (or inconsistency) has been made in the actual grading of an exam question, you may request that the grading of the question be reconsidered. All such requests should be made in writing, indicating your reasons for the request, and given to me personally.

Academic Integrity

We all have found ourselves in challenging situations, which can sometimes lead to bad decisions. **If you ever find yourself in a position where you feel the need to do something that could be considered "academic dishonesty", I ask that you talk to me first**. There may well be something I can do to help you avoid a potentially very damaging situation. Each student in this course is expected to abide by the Ball State University Student Academic Ethics Policy (www.bsu.edu/associateprovost/academicethics). This institution takes any violation of the Academic Ethics Policy very seriously. If a breach of the Ethics Policy occurs, I reserve the right to advocate for the strongest penalty under the policy, which includes expulsion from the university. The abuse of academic ethics damages the reputation of Ball State and of our students, alumni and employees. Examples of a breach of academic integrity include copying another student's work on an exam or assignment, copying text from a source without appropriate citation, and allowing another student to copy your work or your exam answers.

Diversity Statement

Ball State University aspires to be a university that attracts and retains a diverse faculty, staff and student body. We are committed to ensuring that all members of the community are welcome through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse as expressed in our Beneficence Pledge. For Bias Incident Response information, please click here or e-mail reportbias@bsu.edu.

Statement Regarding Possible Disability

If you need course adaptations or accommodations because of a disability, please contact me as soon as possible. Ball State's Disability Services office coordinates services for students with disabilities; documentation of a disability needs to be on file in that office before any accommodation can be provided. Disability Services can be contacted at *765-285-5293* or *dsd@bsu.edu*.

Teacher Education Statement

If you are a teaching major, or if you think you will ever decide to be a teaching major, then you should save the required assignments, exams, and laboratories (also known as artifacts) from this course for a teaching portfolio. For more information, see
http://cms.bsu.edu/Academics/CollegesandDepartments/Chemistry/AcademicsAdmissions/Programs.aspx

FAQ's

1. ***What should I do if I miss (or will miss) an exam or quiz?***
   Contact me (via email) ASAP. Let me know BEFORE the exam or quiz, not after. Acceptable excuses are sanctioned University event (member of the soccer team, etc.), illness, death of family member, etc. Missing an exam because you forgot or overslept is not an acceptable excuse.

2. ***Can I make up for a missed exam or quiz?***

Yes, you may if your excuse is acceptable. You will need to set up a day/time with me when you will take the exam. If you fail to show up for the set day/time, you will receive a zero for that exam. If you are late for the set time, you lose the minutes you can take the exam (i.e., if you are 10 minutes late, you will have only 40 minutes to take the exam).

3. ***I'm really struggling in class. Where can I get extra help?***
   You are more than welcome to come to my office for extra help and request alternate office hours if you have conflicts during all of my regularly scheduled office hours. The Learning Center (North Quad 323) is highly recommended as one place you may get extra help. There are also postings around campus where you can hire a personal tutor.