Success in Organic Chemistry
Academic Success Center
Iowa State University

Students committed to learning will find many possible paths to success. No path is error free, but the path best for you may not look like the same path as another student. For this reason, students should continuously assess their academic progress in courses and adjust their academic strategies accordingly.

Organic chemistry has a relatively few simple concepts involved in many different reactions. These concepts include valence electron orbitals, resonance, and electrophilic and nucleophilic properties, among a few others. The important part is to make connections between these properties to understand how molecules will react and why. By understanding the mechanism behind each reaction, you will be successful in organic chemistry!

Commit time to organic chemistry. This class requires many hours of studying outside of class every week. If you cannot commit this time, there is a good chance you will fall behind or struggle to keep up.

Use your time effectively and stay organized. It will not help you learn organic chemistry if you are staring at the wall for half of your study time. Make sure to use study time effectively by:

- Connecting new material with past material, and
- Understanding exactly what is going on.

By the first week, you should have a good list of all resources you will use throughout the semester. Organization is crucial to saving time. After a period of studying, you need to ask yourself:

Am I using my time effectively?
What was effective about this study period and what did not work?
How can I do better next time?

Use these reflections to immediately make changes in your study habits.

Prepare for lectures. Use the syllabus to find out what sections will be lectured over before you go to class. The lecture will clarify what you did not understand and potentially ask questions to the professor. Preparation for new content in lectures includes:

- Reading the new content in your book,
- Reviewing and understanding new vocabulary words, and
- Looking at the main idea in each section.

Develop your own method to taking effective notes in class. Do not just copy down slides of information. Focus on:

- Taking notes you can use later to understand the big picture.
- Recording content not covered in the textbook, or content emphasized by the instructor.
- Writing what the instructor says about the concepts may be more valuable than what the instructor has written on the board or in PowerPoint slides. These verbal cues may be critical to understanding what the instructor’s exams may look like.

Another tip is to write down questions that you have during lecture so that you can look these up later.
Use one of your most valuable resources—the textbook—to its full potential. The textbook usually contains everything you need to understand organic chemistry. Using the textbook not only makes studying effective, but it develops your reading skills that you can apply in other classes. Additional tips get the most out of your book:

- Do not just read the book—use the book.
- Stay organized to know what sections you need to read and understand.
- Review the textbook preface or introduction to get study tips recommended by the author, to understand how the book is organized, and to learn more about online resources from the textbook publisher.

Work through the textbook’s practice problems. Reviewing textbook problems to study is efficient as they are very organized and thorough. Use them to your advantage in efficient studying sessions. Doing textbook problems—even if not required—is one of the best ways to study.

Go to Supplemental Instruction to meet your peers and ask questions, and don’t be shy! Meeting other dedicated students is a great way to encourage each other to succeed. Be a positive example for other students learning organic chemistry. Make sure your SI leader understands where you are having trouble. By forming a study group you can meet new friends and study more effectively. One of the best ways of learning the material is to explain it to others. In addition to SI, you could also try:

- The organic chemistry help room
- Tutoring
- Forming peer study groups
- Meeting with the instructor or teaching assistant
- Using online resources

Develop the attitude of a healthy student. You need to take care of yourself so that your brain works well enough to be able to soak in the material. Obviously, sleeping and eating right, but to be healthy physically, be psychologically healthy too. Negative attitudes tend to prevent you from studying well—organic chemistry is fun if you have the right attitude. A healthy attitude would be:

I am an organic chemistry student and
I want to learn and understand this material the best that I can!