

How Can You Succeed in Organic Chemistry? I know that you lead complicated lives, and it is important that you are as efficient as possible when it comes to learning Organic Chemistry. Even more important, you need to learn it well!! I spend a great deal of time figuring out the most efficient ways for you to succeed in my class. In the last few years, the class figured out such an effective new approach to exam preparation that they achieved an 86% average on the final exam. I will say that again, an 86% average on their cumulative O Chem II final! I was so impressed, I sent out a survey to find out what went so right. What follows includes what I learned from the survey combined with what I already knew. I have turned it into list of suggestions that have worked for hundreds of previous students. I now send out detailed surveys after every class and update this page every semester.

Go to class everyday and take great notes. These notes will be your primary source of material for the course. Psychologists have a detailed explanation for why going to class is important. There are studies indicating that you will make a much better connection with the material when you are there in person. I have my own evidence I obtained myself. On a randomly chosen day during the semester, we took roll by giving a surprise quiz that was turned in. After the semester was over, we tracked the final grade distribution of the students who were present that day and compared it to the grade distribution of the students who chose not to attend class (the quiz was not announced ahead of time). Click here to see a copy of the original data. The bottom line is that the students attending class averaged a full grade higher than those not attending (B vs. C average). Most important, 70% of the students who ended up getting an A were present in class. Even more compelling, almost all of the students who ended up failing the class were not present in class.

Here is what you should do during the entire semester:

- 1. Outline the lecture notes every week.** That is, rewrite your notes using the fewest possible words, in outline format, with arrows connecting related ideas. The best way to think about this is the following: Pretend you would be allowed to bring a few pieces of paper, i.e. "cheat sheets" to each exam*. What would be on those pieces of paper from the lectures that would guarantee you would get 100% correct on the exam? Make those sheets that cover every week. I will emphasize this again. You need to do this every single week, not just before the exams! *Sorry, we give only closed book exams.
- 2. Outline the reading sections every week.** You will have reading homework assigned after almost every class. Put together outlines of this material every night. Don't just "read and forget", make an outline while you read. It really does not take long.
- 3. Keep your roadmap up to date every week.** A roadmap shows all of the types of organic molecules (alkanes, alkenes, alcohols, alkyl halides, etc.) and with arrows drawn between them, the appropriate reagents and/or reaction conditions written over the arrows, and the stereochemistry/regiochemistry written below the arrow as applicable. Preparing a roadmap is the very best way I know of to keep track of reactions and mechanisms so that you can use reactions in synthesis problems. It gives you the "big picture" in a straightforward way. [For a much more detailed description of a roadmap, click here.](#)

Reasons to use the above outlining method:

- A. Organizing your class notes/reading into outlines will greatly increase the learning process by organizing the important concepts in your mind.
- B. Organizing your class notes/reading into outlines will also focus your attention on any problems you have understanding the material before it is too late.
- C. You will then be prepared to better comprehend the material presented the following week in lecture. New material invariably builds upon old material. Never get behind!
- D. Did you see what I said there? NEVER GET BEHIND. I repeat, NEVER GET BEHIND.
- E. Your study time has been broken down into tasks. When you are done outlining and filling in your roadmap, you are finished. Go have fun.

Here is how you should prepare for exams:

- 1. Use your class notes, as summarized in your outlines and roadmaps, as the primary source of information when preparing for exams. Watch the recorded class videos to clarify or amplify the information in your class notes/outlines/roadmaps.** When surveyed about how they prepared for exams, the students last spring said they used the recorded lectures to clarify any material they were not sure about in their notes. In their written comments, the students told me it was particularly helpful to work through all the video lectures one after the other, sort of like downloading an entire television series season then watching all the episodes back-to-back. Note that the students did not just watch the lectures at real speed, they skipped straight to the sections that answered their specific questions raised by reading through their notes. The [Rules of the Day](#) can be thought of as a lecture guide to direct you to any lecture of interest. [Click here to see all the survey results.](#) Remember, this class ended up earning an 86% average on their final, so you should definitely listen to them!
- 2. When you have finished working through the notes and lecture videos, work through the old exams.** [I have now posted all of my previous exams \(with and without answers\) dating back to 2006](#) to help with your exam preparation.