

Exam Weight: _____

Days Until Exam: _____

Reflect on your study habits using the suggestions below

Have you tried some of them? What worked and what didn't? Ready to try something new?
Check off which tasks you'd like to accomplish in preparation for your Chemistry exam.

Structure and Organization

Organized notes make it easier to find information, as well as help you study in more effective ways. You may also find the process of creating organized notes helpful for your understanding process.

Create condensed and organized summary guides on different topics
(For example: you can organize reactions based on the major functional groups.
You can also organize reactions based on whether or not they have the same starting material or final product.)

Create reaction concept maps to help you visualize the big picture
(This can help you see how functional groups convert between one another.)

Keep your drawings organized and clear
(Suggestions include colour coding by using different colours to distinguish between starting materials, reactants, and products. Also, it may be helpful to highlight the arrows in order to keep track of them.)

Try using cue cards – they can be useful for studying reactions and mechanisms

Comprehension/Understanding

For conceptual courses like organic chemistry, it is important to review the material regularly so that you can fully understand and engage with the material.

Learn the fundamental concepts in mechanisms
(For example: what bonds are broken and formed? Where do the arrows originate from and where do they point to? What specific atoms and electrons are involved?)

Learn the trends and understand them, rather than simply memorizing them
(For example: trends in reactivity, solubility, basicity/acidity etc.)

Consider why each step is necessary in reactions
(Why was this step done here? What is its purpose in forming the product?)

Self-Testing

There are many possible ways to self-test and encourage deeper learning with the Organic Chemistry course material, however, most students don't allow enough time for this study step. Aim to prove to yourself that you understand AND remember the course material, and can apply it in unique situations.

- Draw mechanisms and reactions comfortably from memory
(To further test your understanding, ask yourself broad questions like, "what kinds of reactions can occur with 'x' starting material or with 'x' conditions?)
- Test yourself with your cue cards – cover up certain aspects of the mechanism (starting materials, reactants, products), and see if you can recall the rest of it
- Explain concepts and question solutions out loud to a friend/PAL peer/yourself
- Work on identifying and improving areas of weakness, by doing practice problems

Tackling a Problem

When approaching organic chemistry synthesis problems, here are some important aspects to remember:

- Stereochemistry & functional groups of the reactant
- Reaction catalyst & conditions
- Type of reaction
- Reaction mechanism
- Stereochemistry & functional groups of the product

Helpful Tips

These are some final reminders to help you achieve success in your organic chemistry course.

- Stay caught up with lectures and preview lecture material ahead of class
(This is very important because organic chemistry builds on previous ideas.)
- Study with your molecular model kit to understand the 3D nature of molecules
(Understanding how to use your model kit also saves valuable time during exams.)
- Review your labs (prelab, procedure, results) to ensure a full understanding
(Labs help to emphasize important concepts learned during class.)
- Practice both comprehension and application questions, and do as many as you can
(Such questions can be found in the textbook as well as the lab manual.)
- If you need assistance with a concept/question, seek help early!
(Go to the professor, TA, Chemistry Resource Room and/or PAL Centre.)