

# Module 7: Succeeding in College Chemistry Study Tips

Fundamentals of Chemistry Open Course

# Learning Objectives | Module 7



- 1. Recognize and avoid common misconceptions related to the study of chemistry.
- 2. Apply productive study skills to learn efficiently and effectively in college.
- 3. Reflect on key lingering questions that will guide future studies in introductory and organic chemistry.

# **Study Tips**



- How's your course schedule? Although you may not have much choice, try to structure your classes to put them at times when you're best able to focus and learn.
- Read and understand the syllabi for all your courses. Avoid being blindsided by policies or deadlines.
- Come prepared for class—have in-class materials such as slides or worksheets printed or loaded into your drawing app of choice ready for annotation. Read the textbook before class.
- Many low-stakes assignments in collegiate coursework allow multiple attempts. Review your work after the first attempt and try to figure out where you went wrong—you'll learn a great deal through this process!
- Most introductory college courses use digital forums such as Piazza or Ed Discussion.
   Use these platforms to ask and answer questions!
- Developing a clear and well-organized thought process when solving quantitative problems is *far* more important than any value you'll calculate. Focus on the *process*, not the product!
- Use generative large language models (LLMs) responsibly. They cannot reliably do math in a physical science context, cannot think visually at all, and cull vaguely from a wide variety of sources. Sometimes that's useful; often it's not. Contemplate carefully anything that an LLM tells you.

# **Study Tips**



- Remember to take care of yourself. Many of the habits you form in college will be with you for the rest of your life. Eating well, exercising, and establishing a healthy work-life balance can start right now.
- When you sit down to study, have a clear goal in mind and focus on achieving that goal. Once you've achieved your goals for that study session, do something else—don't let work hang over your head!
- Remember to keep working toward your goals, even when it feels like just going through the motions. Use a calendar or to-do list to keep track of what's on your plate.
- Your professors want you to attend office hours. Visit them if you need help! Come in with specific questions (avoid "can you explain X...") and your existing work on projects or problems.
- At the end of each chapter or unit, take some time to synthesize the material. Making this effort will make it easier to remember and apply the material.
- Keep your peers in mind as a resource for teaching *and* learning. Studying in a group can be helpful, even if you feel comfortable with the material. Explaining concepts or problems to others is a great way to solidify your learning.
- How should you approach exam weeks? Distribute your efforts based on the courses that are most important to
  you. Get some practice and review in but also trust yourself—reflect on your growth over the course of the semester.

### Study Tips



- Take effective notes. Take ownership of course material by writing your own notes. There is no need to write down everything your professors say verbatim—look out for the key ideas and make sure to get those down.
- Use practice problems and informal "self-testing" to gauge your learning. This might look like taking a practice exam, preparing flash cards, or even just asking yourself questions as you study.

### Additional Resources



- How to Study video series. Dr. Stephen Chew of Samford University explains how ideas from psychology and cognitive science can be applied to study effectively.
- <u>How to Do Well in College video series.</u> Dr. Jeff Kaplan of UNC Greensboro gives advice—some of it counterintuitive for students—to be successful *and* efficient in college.
- <u>Student Academic Toolkit.</u> A set of resources from Colorado State University including effective strategies for reading, taking notes, and studying for exams.
- <u>Cultivating Study Skills.</u> Resources from Brandeis University.