

9 Ways to Pass Your Next Chemistry Exam

- 1. Don't Bother Cramming:** Cramming has been proven to not be an effective way of studying. Cramming puts things into your short-term memory- and if you're exhausted, it is very short term. You should study throughout the week before the exam, so that when the day to take the exam comes, you will feel confident in your preparation.
- 2. Practice:** You cannot memorize a page of a Spanish dictionary every day and expect to be able to speak the language next year. The same is true of Chemistry. You must do as many problems from the test, study guides, and notes as possible. The more practice you get, the richer your understanding of the underlying chemical concepts becomes.
- 3. Read with Your Eyes Closed:** Study your notes and our textbook carefully. Then close your material and consider what you have just read. Take out a sheet of paper and begin outlining the material you have been studying. You will see, very quickly, where further study is required. Follow this same procedure for solving the problem sets at the end of the chapter readings. Do not look at worked examples as templates. Simply substituting numbers from your problem into the corresponding places in the example sometimes gets you the right answer but you will not know why. The "why" is fundamental to you mastering the material and doing well on the exam.
- 4. Get the Big Picture:** Reading lecture notes, handouts, problem sets, laboratory questions and reports carefully and integrating all of these sources of information in your notes will help bring the course together. Organizing the material will help you see connections and get the material into your long-term memory. Do not focus a large amount of time on making your notes look good aesthetically.

- 5. Seek Help:** You're going to get stuck. There will be topics you do not understand, and problems that you struggle to solve. This is when you should be utilizing office hours, TA hours, and help sessions such as supplemental instruction.
- 6. Get a COOFer:** That's a copy of an old exam, from your course. COOFer are indispensable study aids. They reveal the format of the test, and allow you to judge the scope of the material and the depth of the coverage. Do not assume, however, that the COOFer accurately reflects the actual content of your upcoming exam. Use these to give you a glimpse at what your instructor thinks you should have studied before the test.
- 7. Consider the Triage Principle:** If you are pressed for time, you may have a hard decision to make. Should you concentrate first on those topics that you don't understand well at all, or on those areas where you have some understanding? Ideally, you would be able to study both, but if you are out of time, you should study the areas where you have some understanding first. You must adopt this harsh philosophy because you will very rarely be given partial credit on Chemistry exams.
- 8. Focus on Learning Objectives:** "Learning objectives" on course handouts and textbook and web pages tell you exactly what concepts you are expected to learn and what skills you must master. You can find lists of operational skills and key words to know at the end of each chapter. Use these as part of a pre-exam checklist
- 9. Manage time:** Get ahead and stay on top of the material. You must spend at least an hour or two everyday studying chemistry outside of the classroom. A four-credit college level course takes a decent amount of time. Careful planning and good time management skills are essential. Set up a regular study schedule and stick with it. Time management can be difficult at times but it is very important in your overall academic success. Make daily "to do" lists and cross out items as you complete them. If you are struggling with time management, visit the Academic Achievement Center during walk in hours to discuss what will work best for you with a Coach.

Useful Links

Content Review:

<http://masterorganicchemistry.com/>

<http://academicearth.org/courses/chemical-structure-and-reactivity>

<http://www.khanacademy.org/>

<http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/intro1.htm>

Practice:

<http://www2.chemistry.msu.edu/faculty/reusch/VirtTxtJml/Questions/problems.htm>

<http://orgchem.chem.uconn.edu/courses/testhome.html>

<http://www2.chemistry.msu.edu/faculty/reusch/virttxtjml/questions/problems/indexam.htm>

<http://chemistry.boisestate.edu/people/richardbanks/organic/mc/mcquestions317.htm>

<http://www.chem.ucla.edu/harding/orgpractice.html>

Bottom line: Do and understand the problems your professor assigns first and if you have time and feel like you need practice. Then refer to these sites

Tips and Tricks:

<http://chemistry.umeche.maine.edu/CHY251/howto.html>

<http://forums.studentdoxtor.net/showthread.php?t=95897>

http://www.ehow.com/how_2312275_survive-organic-chemistry.html