

Previous students have found the following ideas useful. These suggestions are based on research into the habits of "successful" students. Many of the suggested techniques apply to courses outside of the sciences as well.

I. Sciences are hierarchical (each chapter depends on many of the previous chapters). It will be easier if you don't get behind.

A. Skim chapters before they are lectured on, then you will have seen all the special vocabulary making it much easier to take notes.

B. Take notes while reading as well as in lecture.

C. Reread the chapter after lecture, preferably the same day. This can help you avoid having to cram come exam time.

D. Review your notes after lecture (same day), making annotations, corrections and lists of questions for the instructor..

E. **DO ALL THE HOMEWORK** a little bit at a time plus extra problems of the types you find difficult. If necessary, try to make up extra problems, e.g. turn around a problem you've done and solve for something else. Practice really is important, just as in athletics.

F. For each college class successful students allot a minimum of 3 hours outside of class for every hour spent in class. This time is evenly spread throughout the week. For 3 hours of lecture plus a lab this is 10-12 hours per week studying. Typical studying schedules are 1.5-2 hours the day of lecture and 1.25 hours every other day of the week.

II. You will find this course quite similar to taking a foreign language.

A. Vocabulary items: names of materials (elements, compounds); familiar English words which have special meanings in the context of chemistry; specialized equipment; concepts and processes. Make vocabulary lists. Some sources are: in text section headings, boldfaced words; italicized words; and the Chapter Summary.

B. Grammar = logic and math.

1) Logic: you should be looking for similarities (categories) you can use to organize the information and interconnections between different concepts. (e.g. categories of matter).

2) Math: This class requires some algebra, but mostly you need to develop problem solving skills, which come with practice.

a) Don't be afraid to ask for help, both from your instructors and your classmates.

b) There is not one (1) correct way to approach a problem. Many techniques will get you to the same solution. Practice will help you develop the most efficient technique for you.

III. Quizzes and homework should be treated as indicators of what you must master.