Advice for Succeeding in College-Level Chemistry

1. Work with others in groups, but make sure you allow quiet time alone to study.
2. Attend class, take good notes, listen actively. Read over/rewrite notes soon after class.
3. Don't cram the night before an exam, but do study a lot the few days prior. This is in addition to practicing and reading daily (OK, take one day off each week). Learning chemistry is like learning a foreign language, it takes a lot of practice. Remember that the word "chemistry" contains Chem Is Try!
4. Recognize that grades are lowest in science and math at any university. Chemistry requires both memorization and problem-solving, making it a particularly demanding subject.
5. Study two hours for each lecture hour, one for each lab hour.
6. Practice working problems, then STUDY THE PROBLEMS before the exam so that can put problems in categories and so that you know exactly what steps you need for a certain type of problem.
7. Predict the content of exams.
8. For problem-solving, identify what is given, what is asked for, develop a plan (should already have one for most problems), do calculations, see if answer is reasonable, check significant figures, unit s, round correctly.
9. Beware of solutions manuals…you must attempt problems on your own, check for correct answer in back of book/chapter, try to identify errors in your setup and calculations, and use a solutions manual as the absolute last resort.
10. Watch for connections between your everyday life and chemistry. Read labels. Explain events. Watch the news. Also watch for connections between chemistry and your other classes.
11. Try another chemistry textbook if you read something in your book and still don't understand it after reading it several times. Another book might have a clearer explanation.
12. Make sure you are comfortable with the math required. If not, review on your own. You might need to drop chemistry and take another math course if this still does not work.
13. Chemistry is foundational, it builds on itself (atoms to molecules to reactions), make sure to learn necessary algebra, the metric system, the factor-label method, scientific notation, significant figures, symbols and names of common elements and polyatomic ions. General chemistry is an essential foundation for analyt ical, organic, physical, and inorganic chemistry. Organic is critical for understanding biochemistry, etc. This makes it particularly important to not get behind in any individual course and to be willing to review content from prior chemistry courses. Toward this end, keep your chemistry textbooks!
14. Chemistry textbooks are dense, do one section at a time, work problems for that section, take a break.
15. Read experiment before lab, complete pre-lab exercises, bring safety glasses to lab. Make connections between lecture content and the lab.

16. Keep an organized notebook for your notes and problems you have worked. You will need to study exams and homework for the final exam since most chemistry finals are comprehensive.
17. If you do not understand a topic in lecture and the textbook does not help, do not hesitate to request time with your faculty member. Faculty members often can clarify points oneon-one because they can identify where you are struggling. This needs to be done at the first sign of trouble, not later in hopes of a miracle.
18. If you are struggling, don't wait for things to magically get better. If study efforts are not working, immediately seek help from your professor during office hours.