

Dear Math 102 Student:

Welcome to Math 102! We want your experience this semester to be successful and rewarding. Math 102 is a challenging course that demands consistent hard work throughout the semester. Because of this, and because of various misconceptions about mathematics, the pass rate for the Math 102 is usually about 40%. We're letting you know this ahead of time so you can avoid some of the common mistakes made by other students. Here are some of those mistakes and how to avoid them:

Expecting to be graded in the same way as high school: In a university level math course, your grade is based primarily on tests. You cannot pass this course without achieving passing grades on tests. The only way to do this is to master the skills and concepts through careful completion of the homework exercises, review of the textbook and class notes, and extra practice whenever needed. If you get a low grade on *any* quiz or test, you are in danger of not passing. See your instructor immediately for tips on improving.

Mistaking recognition for mastery: Students think that because they've seen the material before, they "know it". This can lead to laziness at the beginning of the semester. Many students wait until they get a poor grade on a quiz or test before they get serious about the course. By then, it may be too late. Work hard from the first day to avoid this. Remember, you only "know it" if you can *do it*. This means you must be able to write out correct solutions for every homework exercise without referring to your textbook or notes.

Believing that with mathematics, you either "get it" or you "don't": This is a myth. Every student can have success in mathematics with enough hard work. How much depends on the individual's background and experience. However, it is important to realize that you *can* earn the grade you want with sufficient hard work.

Not setting aside enough time for homework: Many students are over-committed with work, school, and family responsibilities. Without time to devote to homework and studying you cannot learn mathematics. You must adjust your schedule to allow sufficient time for your math class. While there are some classes where you might be able to take shortcuts, mathematics is not one of them. If you don't have a minimum of 5 to 10 hours per week to study outside of class, you are setting yourself up for failure.

Misunderstanding how mathematics is learned: Learning algebra involves skill acquisition. It is analogous to the physical training involved in music and sports. You would never expect to learn to play piano by going to a concert two or three times a week. Likewise, you should not think you have learned some mathematics just because you went to class and understood your instructor. Your real learning *begins* when you try to do the homework exercises on your own. You have "learned" a section of material only when you can write out the solutions to all the homework exercises without aid from your textbook or notes.

Not addressing lack of preparation: College Algebra is Pre-Calculus (without trigonometry). It is expected that you have a *working knowledge* of Algebra 2 from high school, or Intermediate Algebra from a community college. If you don't, you must get to work immediately to fill in the gaps. There are many resources at your disposal to help you review. Use them! Your instructor will describe all of the available options.

Have a great semester!

The Math 102 Team