

ACCESS

Study Skills Tip of the Week

Do You Have *Math Anxiety*?

Math is Different from Other Subjects

1. Math requires different study processes. In other courses you learn and understand the material but you seldom have to actually APPLY it.
2. Math is a linear learning process. What is used one day is used the next and so forth. (In other subjects you can learn chapter 2 and not 3 and still do OK on 4. In math, you must understand the material in chapter 1 before you go on to chapter 2.)
3. Math is like a foreign language. It must be practiced EVERY DAY, and often the vocabulary is unfamiliar.
4. Math in the university is different from math in high school. Instead of going to class everyday, in college you go only two or three times a week. What took a year to learn in high school is now covered in only fifteen weeks. In high school you practice math every day in class. In college, you must make an effort to review and practice on the days you do not have class.

Math Is Different Math Study Skills-Academic Support , CUESTA College
<http://academic.cuesta.edu/acasupp/as/704.htm>

Math Anxiety Tips

Three things to consider before taking a math class.

- Correct placement

Correct placement is crucial. If the class is too advanced, the anxiety level increases and you are set up for failure. If the class is below your level, it is boring and students tend to skip class, do poorly and end up dropping the course.

- When you last took a math class

One study found that, after one year of not taking a math class, students lost 2/3 of their elementary algebraic knowledge. (Pank, 2001)

- Consider auditing or repeating a math class.

If you repeat a course, most colleges will use only the higher grade for your GPA and you will be better prepared for the next level math course. Auditing a course is a good way to refresh skills without worrying about grades. When auditing, go to class regularly, complete the assigned homework and take the tests-what do you have to lose? Auditing allows you to familiarize yourself with the material and gives you the opportunity to practice before taking it for a grade.

During the Semester

Schedule your math class for your peak time of day. Don't schedule anything for the hours right after that class. This will give you time to review immediately after class, Reinforcing the concepts you just learned. This will also give you extra time on tests if you need it.

Improving Memory

Memory theory tells us that we forget 85% of what we hear within 24 hours. That means that reviewing soon after class and reviewing again later is crucial. A review only needs to last 10-15 minutes. The immediate reviewing is effective because the material is fresh and notes can be updated or revised. Looking at the material a second time (about 8 hours later) allows time for the material to be converted into long term memory.

Establish a routine for working and studying. Set aside a time when you are mentally alert and not likely to be interrupted. Be committed to your study schedule. Even if you don't have assigned homework, there is still material to be reviewed and practiced so make study time a habit.

Reading Math Textbooks

1. **Skim the chapter that will be covered before attending class.** Even if you don't understand it, look at the topics, diagrams etc. Familiarize yourself with what the instructor is going to cover.
2. **Read the chapter after class before doing the homework.** Look over your notes.
3. Make flashcards for terms and formulas. As you read, cover up the material and ask yourself questions on what you just read. Work problems to familiarize yourself with a concept.
4. **Stay current. It is important to keep up with the reading and homework.** Math builds on existing knowledge step by step.
5. **Pay attention to written instructions for each problem.** Instructions define the problem and contain key words that help you know what to do. Students often jump into their homework without reading the instructions. When taking a test, these students become confused because they see many familiar-looking mathematical expressions, but they do not understand what is being asked.
6. **Understand formulas before memorizing them.** People who believe that they can't understand math, try to memorize formulas without understanding them. They hope that math can be learned as sets of rules that will apply in the same way all the time. They are confused when problems aren't exactly like the ones they have practiced. In addition to understanding what a formula doesn't, make sure you know why and how and when to use a formula.

Get Help

If you need help-do it quickly. Don't delay.

ACCESS has tutors for almost every math class at NIU. For quick questions, go to one of the tutoring centers at Douglas, Grant South or Lincoln. They are open 6-11 PM Sunday-Thursday.

You can also sign up for a private tutor for the semester who will guide you through the course. Contact ACCESS/PAL (815) 753-0203 or go to www.tutoring.niu.edu for more information about all tutoring.

Many textbook publishers offer free online study guides which go along with textbooks chapter by chapter. Visit your textbook's publisher's web site and look for "study guide" or "additional materials".

For more information about this and other study strategies call

ACCESS A+ Program

100 A Williston Hall (815) 753-1126

www.tutoring.niu.edu