

# Welcome to AP Calculus AB with Mr. Kaji

## Course Website:

<http://nkaji1.weebly.com/>

## Course Description:

AP Calculus develops the student's understanding of the concepts of calculus and provides experiences with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results and problems being expressed geometrically, numerically, analytically, and verbally. Topics include functions, graphs and limits, derivatives (concept, applications, computation), and integrals (Riemann sums, definite integrals, fundamental theorem of calculus, anti-differentiation).

## All students enrolled in AB Calculus are expected to take the Calculus AB Exam

### Keys to Success in AP Calculus:

1. Calculus requires that you make a substantial investment of TIME. You need to spend several hours each week studying calculus.
2. One of the best ways to learn anything is to explain it to someone else. **Form a calculus study group with fellow students.** A study group has the potential to ease frustration with course material.
3. Math is not a spectator sport. You will need to actively participate – you will need to exercise your brain. Some problems will require some serious thinking. Take time with them, take breaks if you are getting frustrated (but a certain amount of frustration is good), and ask questions if you are stuck, enjoy the process: you are learning!
4. Thinking and understanding concepts will be emphasized in this class. Many problems that require calculus cannot be solved with the simple application of a formula. Understanding the process for solving a particular type of problem is emphasized over memorizing formulas.
5. Classes are held for your benefit. Attending class is important. There is a direct correlation between grades and class attendance.
6. Just as you must play a lot of basketball (or video games) to be good at it, you must do a lot of calculus in order to be successful. At minimum, work every problem that is assigned for homework. If you are having trouble or want more practice, work other problems in that section.
7. The fastest way to get into trouble in calculus is not to do the homework. You must practice what we have discussed in class. Similar problems will probably show up on quizzes and exams, where you will be expected to work them quickly and accurately. Prior students state this is critical to receiving a good grade!

### Classroom Expectations:

**This is a college level course so I expect college level work.**

Our class time is limited! Please strive to be present and on time. It is very important that you spend the entire class period engaged in learning calculus. All school rules will be enforced. When the tardy bell rings, you should be in your seat ready to work.

### Activities/Requirements:

Homework will be assigned daily and will be reviewed and checked randomly. Homework will be graded according to the following scale: 100 means all of the assignment was worked and appears to be correct. 80 means that well over half of the assignment was worked and appears to be correct. 50 means that less than half of the assignment was completed or there are many errors. 0 means that only a small portion of the assignment was attempted or it is completely wrong. I expect you to complete your homework on the night it is assigned so that you can come in for tutorial help the next day, if necessary. Keeping up with the homework assignments is essential to learning Calculus. No one is able to learn mathematics without practicing and working problems. You should expect to spend 2-3 hours a week working homework problems, reading the text, and going over your class notes. I encourage you to work together in groups. Please come see me if completing the homework on regular basis is going to be a problem.

Memory quizzes will be given regularly. The memory quizzes will be 3-5 minute oral or written quizzes and will begin as soon as the tardy bell rings. Therefore, it is imperative that you not be tardy as you will miss the memory quiz. Several

announced quizzes and exams will be given each six weeks. Exams and quizzes can be corrected for an improved score, but corrections must be done in the classroom before or after school under my supervision.

**Suggestions for struggling students:**

- Read the textbook: Read each section before we talk about it in class, then re-read as you do homework and study for quizzes and exams. In-class lectures and our textbook each have their own insights, information, and examples.
- Use the internet as a resource.
- Try homework twice: If you have trouble with a homework problem take a break... then try again. Often your brain works it out while you're doing other things.
- Come see me. I will be available for tutoring several times a week. Don't wait to get help if you are struggling.

**All students are strongly encouraged to attend Saturday prep sessions.**

**Supplies Requested:**

- Pack of Expo Dry Erase Markers
- Spiral notebook (for homework only)
- Folder/Binder to keep all materials organized
- Pencils-please complete all work in pencil.
- Graphing Calculator

**Grading:**

Daily work and quizzes (40%) and tests (60%). You will have assignments everyday with quizzes and/or tests approximately each week. Daily work consists of memory quizzes and selected homework grades. There will not be any retests allowed. However, one test grade at the end of each grading period (9-weeks) will be dropped. Late homework will not be accepted.

**Absences:**

Attending class is an important component to doing well in this class. Mathematics is a subject which builds on concepts covered each day in class. **Do not miss class unless absolutely necessary.** If you are absent, I expect you to email (NKaji@alvinisd.net) me or a classmate to find out what you have missed and to come in for tutoring, if necessary. Absence from class will not excuse you from taking a quiz or test on the following class day. If it is necessary to miss class due to scheduled school events, family emergencies, etc., you should contact me beforehand in order to make special arrangements for exams and quizzes.

*Due to the rigorous pace at which this course is taught, students are discouraged from having excessive absences.*

**Closing Thoughts:**

**AP Calculus is a challenging course. I will work hard to help you learn the material and I expect you to work hard to learn it.** My hope is that you want to learn as much as you can about calculus. My goal for you is a "5" on the AP Calculus AB exam in May. I will do whatever I can to help you achieve that goal. Please take advantage of before and after school time to ask questions or get extra help. Get help immediately.....don't wait until you have been lost for 2 days.

**PERSONAL RESPONSIBILITY IS OF UTMOST IMPORTANCE!**