

AP Calculus...

What else can you say about this class? Are the rumors true? Yes. It's a devilish class which sucks away your soul till your left with derivatives and integrals sliding through your veins. Just a single semester has the potent vile of seducing the fun out of your life and turning you into one of these AP Calculus kids. Yes... we all know who those are. The kids running around back and forth from Mrs. Diallo back to Berkson with their Ti-89's. But that shouldn't stop those brave enough to enter Mrs. Berkson's reign, she's the Queen Bee. So I wish mercy upon those ambitious souls...

Now little social climbers, let's begin training. Don't dare walk into the Queen's classroom without having memorized your unit circle. That would be strike number one. Strike number two, would involve not knowing your trig identities. Ah yes, those formulas which we all sort of looked past when the chapter was done. Both the unit circle and your trig identities will be your life line. They are the only source of hope to look at it when everything has failed (aside from setting the derivative to zero and knowing your derivative and intergral rules). Since only fools know that of which they cannot do. Don't be too ambitious, it could just be your downfall. To continue on with the training, you must learn to not stress yourself. In order to achieve this complex task you must do everything ahead or on time. The Queen does not spare those who do not try. She will gladly label you as a peasant while she showers her monarchy with knowledge. Your teachers may have led you to believe that you're great with numbers, which may have stood until now. Your attendance will be mandatory. Too many absences will cause you to be a peasant unless you deem yourself worthy of her kingdom; which involves making up her assignments, and knowing the lesson you missed prior to your attendance.

“The limit does not exist!” the quote of the century from Mean Girls. However, limits are not your friends. At least they won’t be at the beginning. But you will annoy the hell out of limits until you are one with the limit. Related rates aren’t your best friends and probably will never be. You could only hang around their social circles wanting to be part of the elitist crowd. The Queen will guide you to survival; she will prepare you for war. The exam will no longer seem like an unachievable goal. Follow Queen Bee’s order and the monarchy shall rise to victory.

For those who wish to continue,
I welcome you to ATM’s most scandalous academic elite.

XOXO – Berkson

Dear future Calculus students,

Despite what your friends might be saying about this class or what fear you might have about passing it, Calculus is one of the most important classes you can take in high school. This is only because there is a huge change you will be taking calculus in college (unless you're going to major in 12th Century English poetry). Familiarity with a subject can have a huge impact on how well you do in that respective class. I highly suggest you take calculus your first time in high school, when the class is completely free, rather than seeing the material the first time in college, where it is likely that you and your family will be spending a substantial amount of money for you to pass the class.

Not only is there a financial benefit to taking Calculus in high school, but there is a college admission benefit as well. The most important factor in the college admissions process is the student's strength of schedule. Not your grades, not your hundreds of thousands of community service hours, it's your schedule. To have Calc AB (or BC) as a class on your schedule shows Harvard (or UNC) that you're willing to take on risk and learn new material in a challenging environment. That looks much better than flaking and taking Advanced Topics.

In retrospect, there really isn't anything I wish I knew at the start of the year surprisingly. I felt well prepared as a result of my great PreCal teacher Mr. Trinidad. What I can tell you is to practice, and practice, and.. practice. Practicing the material after learning it in class is the only way you will be able to pass the quizzes and tests. Practice doesn't make perfect, but it definitely works wonders (for your grade). I didn't practice much until the end of the year, which was why I struggled early on. So that's why I'm stressing the importance of practice. Also, the easiest part of all of this is to just come to class. I was hardly ever absent, and this basically saved my grade. Being present for new material makes it much easier (for an already difficult subject) than learning the new material via some sketchy calculus website.

Even though I wasn't the best calculus student, I felt prepared and content for the AP exam. Mrs. Berkson will provide you with enough practice tests to last you a lifetime, and if you do all of them, you will be more prepared for the exam than you thought you could ever be. I mean seriously, it's Calculus. I did all of them, and I felt they were very effective, mostly because my confidence with Calculus was at an all time high. However, success on the exam doesn't only come from practice (which is HUGE), but it comes from having a positive mindset about the test. See the test as just a multiple choice exam with a few FRQs that shouldn't be a problem considering you busted your ass to prepare for it. It's really no big deal. Just take everything in stride.

That's it for today kids. Class dismissed.

Sincerely,

Eric C. Paulsen (UNC-Chapel Hill '17)

Dear future AP Calculus students,

I highly recommend taking AP Calculus if you plan on pursuing any career in Mathematics, Engineering, or any field of science. The topics I learned in Calculus were applicable in my Physics class and AP Biology class, which made me a step ahead of everyone else. The class is quite challenging and perfect for students who need that extra push to motivate them and strive for higher knowledge. Prior to taking the class I would have liked to have a better understanding and memorization of the unit circle. Knowing your points on the unit circle is imperative in Calculus because you work with a lot of trigonometric functions throughout the year and on the AP test. Another thing I wish I knew before the course is all of the trigonometric identities because they are really helpful in breaking down complex trigonometric functions.

A key factor to your success in Calculus is practice. Make sure you do your homework just to practice what you learned in class that day and study every couple of days to keep you fresh. I made sure that I did my homework everyday so I could get the lesson ingrained into my brain and if we ever had a derivative/integral quiz I made sure that I studied the days before so I would be prepared. Something I would do differently is print out the notes before hand because it is extremely helpful in keeping you organized and makes the notebook checks ten times easier. In addition, if you don't understand a certain topic ask a friend for help and if that doesn't work don't be afraid to approach Mrs. Berkson. The easiest way for me to study the concepts we were learning everyday was doing the homework and practice problems. I was absent more than the "usual student", but if I was absent that day I would try my hardest to get to Calculus because I knew if I missed a lesson I would be screwed. Furthermore, if I did miss a class I would text a friend and check Mrs. Berkson's website to see the notes and homework to make up for my absence. The only Pre-Calculus topic that hindered my learning was my lack of expertise with the unit circle. The most important Calculus topics, to me at least, were derivatives and integrals. It is extremely important that you know your derivative and integral rules, especially the rules involving trigonometric functions.

The AP Calculus Exam was one of my easier exams because I feel I was the most prepared for it. I felt extremely prepared because of all the free responses and practice tests we took, and our teacher was amazing at getting us prepared for the test. The practice test booklet that she gave us was extremely helpful because it consisted of questions that were harder than the actual exam questions, so when I got to the test the questions seemed much easier. As I have stated multiple times,

the full length practice tests were the best way for me to prepare for the test.

Good luck,
Andrew Heldenmuth

To incoming calculus student,

To start off nice and slow, this class is a tough class and has a lot of hype about it. All the rumors and stories you hear about it being the hardest and most rigorous class in school, Ignore them. I just finished the entire year off in here and believe me when I tell you, it's not that bad. The class comes with a lot of work, but so does every other class. You have nothing to worry about with it taking up your entire life and preventing you from going out and having fun because you have to study. As long as you keep up to date with the agenda you will be just fine.

Calculus seems like a lot of hard work and concepts that look like an alien race created them. I promise you that once you sit down in Mrs. Berksons class and actually pay attention, everything will flow smoothly. She is a great teacher who can help you understand calculus very well and most importantly Mrs. Berkson is always offering help if you don't understand something. She's not the type of teacher that just teaches and leaves you in the dust. She is with you during the entire road to the AP exam and will ensure that you will pass the test.

You have nothing to worry about or stress about. Just make sure you keep up to pace with all the assignments and especially with the notes. Not only will you be tested on how orderly your notes are but they will also be your key to getting a 5 on the actual exam. They may seem like a lot of work, but I can assure you they do pay off. So do what you gotta do and make sure to not slack off and everything will be fine.

Also, remember you are in an AP class so your grade is not as important as how well you are prepared for the exam. Just make sure you understand all the material and do all the work and review and your grade will be fine. If you just worry about your grade, your going to miss out on actually learning the new concepts being taught and you will be lost. Just keep up with the pace and you'll pass the test and get a good grade.

Wish you all the best in your future calculus endeavors,

Zack Israel

Event though, AB Calculus is a challenging class, it's the most useful math I have learned in high school. Throughout the course I didn't question myself like I usually would have when I was taking geometry or pre-calculus. Of course it's difficult to use the theories and methods but the more you practiced using them the more comfortable you will get with them. So, yes I would recommend this class to other students. Prior to the year I would have liked to know that I would actually need to do homework for Calculus, and practice a lot. Before, I could have gotten away with just learning the material in class and I would get it, but in Calculus that wasn't possible. I couldn't learn the material in just one day. Future calculus student do all of your homework, yes it's going to take more than 30 minutes but when you take the quizzes and test you will realize how helpful it was doing the home work. I would have actually put more effort in doing my homework; I totally failed in that aspect. The best study skill that can be used in math is getting five to ten similar question that the teacher used in class and just doing them, and keep on practicing. I was absent ten days, and that was a huge setback from my learning. Unfortunately, it's very difficult to catch up in Calculus, so I recommend trying avoiding missing her class. It was harder for me because I had her 6th period, the period in which I was already to leave school. The one Pre-Calculus topic I would say that is important to remember would be the Unit Circle, it can avoid you a lot of trouble. Integrals and the Graphs was a topic I believe more time should be spent on studying. The baron's book and any other useful Calculus Ms. Berkson recommend are useful when studying for the AP calculus exam. It was extremely helpful to have the full length practice exams.

Dear Future Student,

Welcome to hell. Calculus is no joke, saying that it's a rigorous course is an understatement, it's very fast pace class in which one topic is taught each day. When I first enrolled in the AP Calculus AB I dropped it 3 times before Ms. Alayon (Former Principal) put me in there. For me this was my first and last AP class in which I was told, its one of the hardest AP classes. During the school year If I was given the option of the death penalty or take calculus, it would have been a tough choice to make. I do not recommending missing class but on the rare occasion that you have to, I suggest asking Mrs. Berkson for the powerpoint slides ahead of time and then write down any questions that you might have.

Now for the Devil part of all, the AP Calculus College Board Exam. Where do I even begin, a couple of weeks before THE TEST, when I say I was stressed that is an understatement, I couldn't sleep, I got so nervous for the test that I got nose bleeds constantly, and overall I was scared. When the test came I stayed positive, had to breath as if I was in labor and throughout the test I could feel the contractions. During the test I noticed that there was a pair of scissors to my left and I felt tempted at time, especially when those free responses questions came up. I carried on the test with a positive attitude and to do the best that I could.

But don't take this class for the 'A' or for the name of the class, because reality will hit you like a pile of bricks when you FAIL ... a test. Come into this class for the knowledge don't waste your time for a stupid grade, because as Nelson Mandela once said knowledge is power.

Even though it sounds like I had a bad experience, I really didn't it was a great learning experience, and I would suggest to anyone to take the class. It was a great learning experience that didn't only teach me about math it made me a better student. Mrs. Berkson will answer any questions you may have and she doesn't judge so ask as many questions as possible and learn from them because in reality there are no stupid questions. Keep your notes organized and if you want to be a nerd make your own study guide of each chapter at the end so that when the AP test comes you will have your own study guide that is tailored for you.

Dear future Calculus student,

I want to congratulate you on your decision to enroll in AP Calculus AB. First and foremost you must realize that Calculus is a very rigorous course. If you have a strong background in mathematics, I would recommend taking Calculus. One great benefit of passing the AP Calculus AB exam is the opportunity to earn college credit and placement. You can save money and get a head start on your degree when you enter college. Taking a challenging AP course such as Calculus can help you succeed in college as well. Once you're in college, the skills that you developed in Calculus like critical thinking, time management, study skills, etc. will serve you well in college classes.

Prior to the start of the year, I wish I would've known how to organize my time better. I made the mistake of organizing studying hours inefficiently, therefore, hindering my overall grade in the class. Make sure you keep track of what you should do every day in order not to get behind. Remember that practice makes perfect, and that there is no such thing as too much studying.

One thing you should keep in mind is to never be absent to class. If you find yourself falling behind, get help immediately or work with a group of classmates. Unfortunately, this happened to me after being absent once or twice throughout the year. I found myself trying to learn new concepts outside of class which I found to be extremely difficult. Keep on track! This is a very difficult and time-consuming course. Expect a lot of time to be spent on homework assignments, and take advantage of every possible moment to study and practice. In my case, one thing that I would have done differently was the way I studied and practiced before a test. I felt like I didn't challenge myself enough to perform well on the unit tests. On the other hand, I wouldn't change the amount of notes I took on a daily basis because it helped me study afterwards for a particular test. Reading a certain section before coming to class helped quite a bit. It helps you get an initial understanding of the concept, therefore, eliminating confusion the day Mrs. Berkson teaches. I would've definitely practiced for longer periods of time outside of class in order to achieve a better grade on assignments. If there was any Pre-Calculus topic that hindered my learning, I would have to say it was the unit circle. The unit circle should not be taken for granted, and should be memorized to the best of your ability prior to the beginning of the year.

In overall, the AP exam took several hours to complete and was very stressful. I felt confident and prepared for the exam after reviewing practice problems from the packets I received. The full length practice exams give you an idea of how the AP exam is going to be like and help you realize what topics you need to study more in order to fully understand the material.

I SURVIVED!

If you are reading this then you will probably take Calculus next year. It is a challenging course but it is NOT impossible to get an A. I recommend you take this class because it will help you not only academically, but also in life. Plus you get a college credit if you pass (save \$\$\$). Before you start you should be completely sure that you want to take this course. If you feel you won't spend time on the work then don't bother. It requires much more time than any other math course. My advice to you is, ALWAYS do your homework and if you do not understand a problem look it up or ask the teacher until you understand it. If you understand what you are doing on the homework then you will barely have to worry about studying for quizzes and tests. Also, one of the most important things is NEVER be absent. You miss one day and it's as if you had gone 2 years into the future and all that you are looking at does not make any sense. However, if you do miss a day Google is there to help. Math builds on previous topics and if you miss a day there will be a gap that will affect you later on. When studying for the AP tests take the practice tests seriously and try to understand every question. Have fun!

Carlos Vega

Dear future student,

The first thing I want to tell you is don't be lazy! I cannot emphasize this more. To those of you who came from doing mental math, it's going to be a long year. You will soon realize that a simple step of work can bring your grade from an A to an F. If you are not willing to adapt to the new system of math and grading, then do not take this class. Do not waste your time or Mrs. Berkson's time. Conversely, if you are extremely dependent on your calculator, learn your basic arithmetic because you will barely be using your fancy TI89. This class will become probably the most important class you take in high school. At the end of the year, when I had to balance out 5 AP classes, like some of my peers, calculus was really the only class that we wanted to get a 5 on. But, if you are willing to put in the time and prioritize your classes, then go ahead and take the class. This has been the most rewarding class I have taken in my life. Never had I worked so hard to achieve an A in the course. The satisfaction of actually understanding a calculus topic is the best feeling ever!!

I wish I would have known that AP calculus was not really as difficult as everyone makes it to be. It is completely possible to get an A, and to pass the AP exam. Don't underestimate yourself because I can tell you from experience that if you put in the time, you will see great results. Keep a positive perspective on the subject and don't let one grade ruin your week. In the end, it all comes down to the AP Exam and how well you did in the course overall. But don't get overconfident in your natural math capabilities because chances are, everyone that takes this class is naturally good in math and people still fail. Never underestimate the class yet don't worry too much, it's not rocket science.

There are so many things that I strongly encourage you to do. Although each person uses different studying techniques, I can tell one thing that is consistent among all students in AP Calculus. People don't say practice makes perfect for nothing. This motto will never apply more perfectly than to this subject. Trust me when I tell you that after 10 practice tests or 50 practice problems, you will finally understand the topic. Next, don't cheat the system. Don't think that you're so clever because you found the answers to the free response questions given in class or you found a way to cheat the homework system. You're not. We learned this lesson the hard way. Don't copy people's homework, don't copy free responses from the internet, don't cheat. Mrs. Berkson will find out and punish the entire class. Don't mess it up for everyone. Another thing I recommend is to not cram the night before a test. IT WILL NOT WORK. Start studying at least 3 days before the test. You will retain everything much better. Even though you're done with a chapter, it will come back to haunt you in May. Additionally, don't just ignore a subject because you don't understand it. This all ties back into being LAZY!!! At the end of the year, you will be so happy you actually remember stuff from October.

Absences are another story. DON'T BE ABSENT. There were people in this class that would not come to school for the entire day, yet would show up just for 6th period (calculus). This just shows you how dedicated you need to be. It's not the end of the world if you miss class once in a while, but it should not become a habit. Therefore, if you like to skip class, don't take calculus. For those of you in sports, as long as you keep yourself on track, you will be fine. Don't assume that Mrs. Berkson will follow you around to get your work. She will fail you.

Academically, you better know your unit circle before stepping into this room. It is the worst feeling ever when you know how to do a problem, but then can't get the right answer. Just be thankful that the right answer is only worth one point. Moving on to calculus topics, don't ignore

limits. Being the first topic you will cover, it is easy to forget. **DON'T FORGET ABOUT LIMITS!** Overall, don't ignore topics you hate because unfortunately college board does not take your opinion into account.

The AP Exam is not that bad. The best tip I can give you is to do practice multiple choice tests from a burgundy book ms berkson hides in the back. I took almost 8 practice tests and after the struggle, my scores increased dramatically. **START REVIEWING EARLY!!!** Don't wait until the week before. For free response, review the questions from the past five years.

Hopefully you'll get lucky on the 2014 exam.

Sincerely,

Tatiana

Dear future Calculus students,

Taking this class has served as a great benefit to me. Although I may not have done as well as I expected, I know that in the future taking Calculus will be much easier. One thing that you do need to keep in mind is, if you take the class, do your best to pass, and get college credit; if so, you will not have to take this class in college. Which would be saving you time and money.

Keep in mind that if you sign up for this rigorous class, you need to expect rigorous work. It is not Trini's class anymore. It is Calculus AB with Berkson. You must be disciplined, organized, and most important motivated. If you see yourself lacking motivation, as I saw myself, don't give up. Keep trying and you will reach your goal (taking the AP Test). Yes, I know it might get overwhelming while you're staying home studying for your derivative test or quizzes while your other friends are done with their homework in thirty minutes. Just remember that you get to say "Oh no I don't remember that, I'm in Calculus we are not seeing that topic anymore."

I'm a perfect example of someone that expected to stay focused and organized throughout the year, but slacked off and dropped. In this class if you slack and miss classes it is very hard to get back in the bandwagon. One key piece of advice I have for you is, **DON'T MISS CLASS**. When you miss class, you've just missed an entire lesson and in the next lesson you will have no idea how to do implicit differentiation. I wish I knew how much damage to my grade I could have prevented if I hadn't missed three days during the same week. If you don't want to go to school that day it's fine, don't go, but you must come to Calc no matter what.

To some, their goal was to pass the AP Exam, but to me it was to take the AP Test. The day before the exam I was freaking out, not only because I was nervous, but also because my entire class was in the verge of a panic attack. Once I arrived in my testing room, I said to myself "Wow. I did it." The test itself is not that bad, if you know the materials and you are confident with what you've answered, then you'll be just fine. I knew that whatever score I may have gotten, the most important thing is that I had taken the challenge and familiarized myself with the topics.

Last piece of advice... **HAVE FUN**. Take this class with respect, joy, and motivation.

GOOD LUCK!

Anonymous

Dear future AP Calculus AB Students,

AP Calculus AB is not something to be taken lightly or blindly. Don't be fooled by a high grade in Pre-Calculus just as I was because Calculus is a whole other world awaiting your arrival. In all honesty, unless you're planning to major in engineering or any other mathematical major that may require Calculus, I do not believe you should take this course. Calculus is rigorous, fair on the work but unhealthy on the mind. This course makes you dream of functions and formulas and would drive you to the edge of sanity. As a survival letter, I warn you on taking this class because if I have known that Calculus makes you question your existence prior to the start of the year, I would have just agreed upon taking Probability and Statistics and would possibly have a smile on my face rather than a frown of misunderstanding and lost causes.

If you're still brave enough to take this course, there is plenty of advice I would love to share with you. To start off, please listen to the teacher. This fundamental basic is one of the hardest ones to follow and could easily be your downfall! Moreover, don't you dare use Calcchat.com. This website here gives you the answer to most of your homework but coming from experience all it does is suck away the possible knowledge you would have learned if you actually did the problem. Thirdly, please ask questions. When you don't ask questions in class it makes it look as if you know all the given material that was presented in class. Then the test comes and you get a nice red "F." Of all the advice listed here, these were all my mistakes and would have changed each one if I could just start over from the beginning. Calculus isn't a simple easy class that would make you look good to colleges but a monster that can suck you down the drain entirely so always be present, ask questions, don't use websites for answers, and listen to the teacher!

Eventually time catches up with you and out of nowhere the AP exam is right around the corner. You may be reading this saying "Oh, it's August, I got plenty of time" well you're in for a nice surprise. I said the same thing and there I was on May 8th, exam day, staring at the clock and constantly asking why I didn't start studying from the first day of class. To the truthful, the exam itself isn't as bad as one may think; however, that doesn't mean studying two weeks or a month prior to the test is going to get you a five. As a recommendation, make sure you know the list of "When You See" and all your basic steps to solving multiple questions. There are plenty of online tutorials across the internet and full practice exams that would greatly improve your timing and skills. All in all, Calculus is rigorous and your responsibility but in the end it was be well worth your effort.

Sincerely,
Daniel Khaytman

Dear Future Students,

Taking AP calculus will be one of your decisions in high school that will either make you or break you. I would recommend taking this class just for the sole reason that you can experience some higher level math that will help you in the near future. Whether it will be for college or just because it relates to your major. An advice that you should follow is to study because there is a lot of remembering in this class. From trigonometric functions, to theorems, and to formulas. What I would have done differently is to study more. I was barely absent and if I was, I would just ask my peers to go over what they did the day I was absent. Make sure to copy notes as they will help you. The topics that should be studied the most are derivatives, integrals, limits, or pretty much the major concepts that make up the subject.

The AP exam consisted of two multiple choice sections: one for the use of calculators and one without it. It also included six FRQs which are tedious if you are not prepared for them. I was sort of prepared but I know I could have done better if I studied more. The resources that prepared me for the exam are the teacher, practice tests, and online study guides. The full length practice exams were helpful because you get to experience how it was like to sit in a classroom for three hours. In the end, I would advise you to take this class but be prepared to not slack.

Good luck,
Andy Ng

Dear future students,

First at all I would like to say that this year wasn't easy. Calculus is not a difficult subject. It's all about the understanding the concept. I wish I could go back to the beginning of year and study harder. I was very lazy, and most time I didn't study at all. More you study, better understanding you will have.

I personally would recommend this class to all students, even those who don't like math. Calculus helps to improve critical thinking and attention. Details in calculus are very important, because even one wrong sign changes everything.

I would advise you to do not skip calculus classes and to do all homework. During every class you will cover some new topics and tricks. Throughout the year I was skipping a lot and because of that I suffered. As a result I was studying by myself many long and sleepless nights, to do not fall behind. The only skills that helped me to study are practices and self-education. I was trying to cover chapters that I missed at home.

There are not any calculus topics that should be studied more than others. Everything is connected. You have to understand one concept and only after to start learn some new topics.

AP Exam was pretty difficult, especially free response part. I was prepared normally, the problem is that I was studying for last 3-4 days, and I covered almost all topics. And during the exam I was confused, I didn't know which knowledge to use. That's why it is better to study on time. Practice exams were very helpful. That help to cover all topics that you should know. So it's better for you to go over practice tests before the AP exam.

Regards, Smbat .

Dear Future AP Calculus Student,

Taking AP Calculus was a brave choice. I congratulate you on your decision to take such a rigorous class. AP Calculus is not a hard subject, and I encourage anyone who likes math, or at least tolerates it, to challenge themselves. While the subject itself is easy, based on only two concepts, derivatives and integration, every lesson builds on the previous one. You have to be in attendance every day. This class is not for people that regularly miss school or for lazy people that procrastinate. If you miss class for whatever reason, and it better be a good one, then just email Ms. Berkson and she will email you the PowerPoint. Once you get the PowerPoint, actually look at it, do the homework problems, then go to her the next day and ask her any questions you might still have. If you do not get a lesson, or do not pass a test/quiz (it will happen, no matter how smart you are), do not get discouraged. You will eventually get it with the help of Ms. Berkson and your classmates (if they know what they're doing...they may be as confused as you)

Preparing for the AP Exam is really easy. The practice tests that Ms. Berkson gives are very helpful, as is reviewing your notes. I personally didn't find any of the review books necessary or helpful, just a reiteration of math concepts that might actually confuse you with their explanations.

Tips:

- Learn your unit circle. Memorize it. Know it by heart. Make it your best friend. It will help you in the long run and make life so much easier. Trust me!
- Know your trig functions
- Do the homework. This is not the class to slack off. Practice really does make perfect (or at least makes you better than before :) (Don't copy...not only do you not learn, but..Ms. Berkson knows!!!)
- Do not let a lesson fly by without understanding it completely. Every lesson is crucial.
- Ask questions. The more you ask, the more you know
- Take the free responses seriously. Not only are they for a grade, but they actually help. Do not copy them from Google or your friends. Ms. Berkson knows!
- Be in class...EVERYDAY!
- Pay attention in class...EVERYDAY!
- Use time wisely...if you have time to work on the homework in class, with the teacher there and fellow classmates, do it.
- This applies to all other Aps, do not wait till the last week before AP test to study...Just don't.

Overall, this class is worth taking. I loved it and I wish you the best of luck (you'll need it :) Remember, Ms. Berkson knows!

Sincerely,

Dennise Boncea

Dear Prospective Calculus Students,

AP Calculus is a very useful course, especially because it is most likely a required course in college. Some colleges might accept the credit or use it as placement. If they don't at least you'll be taking the college course with all the background knowledge, having taking the class beforehand. I suggest anyone who is good at math and solving problems to take this course because they will most likely do well if they do what is expected of them throughout the year.

Prior to the start of the year you need to make sure you know all the trigonometric identities and memorize the unit circle. If you did well in Pre-Calculus with Mr. Trinidad, you should be well prepared. The most important advice I can give is to start learning the formulas and methods throughout the year as you learn them, instead of leaving it for the last month before the AP test to start cramming. It is also imperative that you come to class everyday and pay attention to the Power Points so that you don't fall behind. It only makes getting a good score on the AP exam much more attainable.

Having good memorization skills helped me excel in this course because I had already known the unit circle and trigonometric identities from Pre-Calculus. Pre-Calculus topics did not hinder learning at all. If anything, it makes you faster at understanding actual Calculus topics. I was barely absent to class, and that is one of the factors in me doing well in the course. I never had to allot extra time for studying because I was in class everyday, able to absorb the material that was going to be covered on the test.

The Calculus topics that should be given most importance and not taken for granted are Derivatives and Integrals and their respective applications. More than half of the test consists of these topics. If you understand the concepts, figuring out what it is they are asking you on the test becomes much easier.

In the end, the AP Exam was not as difficult as it is expected to be because of all the preparation with Ms. Berkson. The other resources other than class notes that we used to prepare for the exam is the practice material Ms. Berkson gave us. I would actually not suggest getting an extra practice book because you will not end up using it. Ms. Berkson has you do her own practice tests in class and gives you a review project to do that helps to prepare you. Her review material is so thorough that the other review books are useless. The full-length practice exams were very helpful because they give you a feel of what the actual test is like and gets you accustomed to test sitting down for a prolonged period of time.

Best of Luck,

Jessica Jochheim.

Dear Future Calculus Student,

Warning! The calculus class you are about take requires dedication, motivation, hours of practice, organization, and a love for difficult math problems. I would only recommend this class to students who enjoy math, are succeeding in their current math class or need it for their major in college. You may take it if you simply want a taste of a college calculus class, but remember your grades and GPA are at risk. If I were to take this class again I definitely wouldn't have procrastinated till the day before the chapter tests, and would have tried harder to solve all the homework problems. I wish I would have given more value to the importance of practicing problems. If Mrs. Berkson gives you the option to do homework then DO IT! Don't be lazy and don't wait till the last minute to do all the homework problems as a way to study for the test. I instead advise you to do every single math assignment and if you don't understand something ask. The best thing I did was study with someone who had an A in the class, so that if I had any questions they could help me out. Studying in a group truly does help because teaching someone else makes you understand the topic better. Make sure to remember all your integration and derivative rules, because it's the key to all calculus problems and makes your life so much easier. When you take that initial unit circle test...Don't blow it off! Keep remembering it because it will pop up in every Trig question. Flash cards always help, and Quizlet does too.

I was never absent for a long period of time, but if I missed a block day I was completely lost! If you are a senior, try to schedule all your college visits on the weekend or on a day when you don't have calculus as a block. Missing a couple days in a week could mean missing a whole part of a chapter, and the order in which you learn calculus matters. It's like a domino effect, if you don't understand either differentiation or integration you could be lost for the whole year.

How well you performed in Pre-calculus or even Algebra II has an effect on Calculus because everything comes back or gets used. The unit circle, factoring, anything with exponents...etc all gets used in some shape or form. There is even geometry!

How many times have I said this? Well let's just say it again...Don't take integration or differentiation rules for granted!! You will always be using them in every problem. The Unit circle is also important because it will pop up in the FRQ's.

The calculus exam is very long and tiring, so make sure to get some sleep and know how to do calculus without the calculator. Mrs. Berkson gives most of her tests without the calculator, so as long as you study you should be fine. I wasn't as prepared as I would have liked because I'm not going to lie...Senioritis started getting to me. Solving all the practice AP tests truly help because the way the questions are phrased are what throws you off! But questions do repeat themselves so the "When you see" list helps. So the moral of this letter is Practice Makes Perfect and I wish you good luck as you enter a new chapter in your mathematic life!

Sincerely,

Former Calculus Student and 2013 Graduate.

Dear future AP Calculus students,

You are beginning your journey with AP Calculus AB. This year you will endure many hours of work and it will definitely require patience and motivation. But don't worry, math is such a wonderful subject that it does not close its doors for those who are ambitious and put effort into their work. I would definitely recommend this class for anyone who is motivated and knows all the math concepts up to pre-calculus. And of course the most important requirement is that you DO have to like math!

The first thing that I would suggest before even starting the course is to schedule yourself at least an hour a day that will be dedicated for the Calculus assignments and homework's. You definitely do not want to fall back on your work and schedule. If you do every assignment/homework the day it was given this will definitely save you a lot of trouble in the future. If you start studying from the beginning and you do not procrastinate you WILL be successful in this class. Just remember - practice makes perfect - so the more problems you do the better you will do on tests, quizzes, assignments and so on. The other thing that I would like to advocate is to try to understand what you are doing at the time – try to get the “big picture”. Not only memorize all of the formulas and concepts but also understand them. By understanding what you are actually doing, you will be able to notice the connections between topics and concepts. You will see that one thing leads to another and you will see the patterns. Calculus is not a very hard course it just requires work and patience.

Start reviewing for your AP exam early! Do not begin your work a couple of days before or even 2-3 weeks before. Start working on the review the day you finish the material in class. This will definitely lead you to a good score and satisfaction. My advice would be to do a lot of full length practice exams and mark everything that you do not understand and then try to comprehend how to solve the problem. Don't worry if you do not understand some questions Ms. Berkson will always be there to help you and solve the issue.

The last thing I would like to say to you guys is just have fun – don't stress it! It is math – it is supposed to solve problems not create new ones ;) Oh and remember learn your unit circle!!!

Sincerely,

L.P.

Dear Future AP Calculus Student,

Prior to knowing the necessary things for survival in this course, make sure that you consider yourself a dedicated student willing to put in the hours needed to master the material. Each day in class, you will be exposed to new topics or new applications and it is important that you keep track of everything in this fast-paced course.

Enrolling in this class has to be one of the bravest choices you make in choosing your AP classes; however, I most definitely recommend taking this class if you are a student that is interested in a career in math or science. Taking this class in order for it “to look good on your resume” even if you’re not interested in the subject is one of the key things that play a role on your success. In order to succeed, you must be devoted to learning and mastering each topic presented to you every day in class.

In the beginning of the year, I wish I had known just how much I needed the Unit Circle. When talking to current students, I’d always hear the words: “unit circle, unit circle, unit circle.” Unfortunately, I’ve proven that it doesn’t really register until the class is already moving fast in the first weeks of school. My advice to you is that you take everything you hear into account and actually prepare the prerequisites before you set foot into class in August. Once the year begins, make sure to do all of the homework assigned to you (even some problems that aren’t on the homework if you need help); the idea is to learn the material in class and master it at home. Utilize the time in class given to you with your teammates wisely although it may be tempting to get distracted with your free time. The biggest advice that I can give you is PRACTICE, PRACTICE, PRACTICE. I know that as a student you might hear this all of the time and disregard the advice, but it is one of the most important things to do with math. If you are not naturally comfortable with math, it is crucial for you to be in class with the least amount of absences possible. Each day, Ms. Berkson will be answering questions and teaching new concepts, and unless you are able to catch up on your own, it will be difficult to keep up pace with the rest of your classmates. There are two topics that in my opinion define calculus: INTEGRALS and DERIVATIVES. I cannot stress just how important it is that you master these concepts to the best of your ability throughout the year. Although the basic applications of these topics may seem simple at first, almost all of the questions that will appear require some application of one of these two topics. 1) Know when to use each one. 2) When Ms. Berkson tells you to memorize the rules....memorize them. 3) Be patient- with enough practice you will get it. It will only get more complicated the further you get into the year.

May 8th was the most important day in this course – the AP Exam. All of my preparations had led up to that moment. In the month before the AP Exam you will be presented with plenty of resources for you to practice- Ms. Berkson will provide you with so many full length tests and the best you can do to prepare is complete them. On exam day, I felt prepared yet anxious for the test. We had been prepared well but the only thing that was left was opening the test, pacing myself, and completing it. Having completed the course, the best advice I can possibly give you is to pay attention, practice, ask questions, and memorize the necessary formulas.

It’s really not as bad as it sounds...GOOD LUCK!

Dear future students,

This is a survival letter. This is not a success letter, this is not a fun letter, this is a survival letter. Chances are you actually examine your class before you go into it. LUCKY YOU. I didn't. Two years in a row I was put into this class without asking for it, and the first I rolled with it and the second time I said why not. It got harder. Calculus is not for those that have a rough life, for it demands dedication. In your life, the one love you shall hold is that to numbers. Family comes second, and friends a distant fourth behind your other schoolwork. Don't take this class if you have doubts. It is possible to get through, easy to survive, and impossible to succeed unless you embrace this class and let life fall into an orderly method. Good luck, because you can do it. It'll suck out your soul, but you can do it. I survived, I wish for whoever reads this to succeed. The subject of this class is a beautiful examination of numbers, and it shows the depths of knowledge. Be ready, or become ready.

Dear To whom it may concern,

In my time spent in this class obviously I learned a lot. Not just mathematical skills but I learned things about myself as well. I would recommend this class because it was challenging and the fact that you're taking it and you survive reflects positively on you. Before I took this class I would have liked to have known before more about the study techniques that worked best for me especially with memorization and applications. My advice for future students would be to never be absent! This is a college level class and students will be treated as such. It is the students job to make sure they are organized themselves. I would make sure two of the most important things to know is analyzing graphs and understanding the applications of integration. The AP Exam was a lot easier than expected because full length practice test are extremely helpful. I always stayed organized and never missed a class, the fact that this class was so structured it made it easier to keep track and keep organized. Pre Calculus was a great algebra review for me but during the first few lessons Mrs.Berkson will highlight the fundamentals necessary to continue which was helpful. Overall I wish whoever is reading this the best of luck and please don't make the same mistakes we did. Along with the specific tips for this class all the other general rules still apply. Be respectful, leave the cell phone in the book bag, take notes, and ask questions. If you just let Mrs.Berkson be your guide you will go far and learn a new appreciation for the logical world.

Forever Yours,
Former AB Student

To the Calculus Student:

Calculus is much easier than you think. You will struggle to get an "A" in the class, but you will not struggle to do well on tests.

A few tips:

- The amount of homework and studying you do is directly related to your grade.
- Become good at memorizing and recognizing patterns and equations. Flash cards might be useful with different types of equations.
- Graphs are your best friend. If you understand different types of graphs and can recognize how a graph moves across the x-axis, you will be fine.
- Stick with one calculator throughout the year and use it as little as possible.
- To prepare for the test, it helps to read through the chapter the day of (*hint) (it takes 30 minutes/chapter, tops)
- Keep organized throughout the class. It helps to print out the ppt. notes the weekend before class.
- Try to do the free response practices on your own. There are always trigger words in the question to tell you how to solve the problem.

Prerequisites:

1. Know your trig circle inside and out.
a. There are inverse problems that knowing basic trig comes in handy.

2. Know your algebra

a. If you can't do Algebra, you can't do Calculus. Know how to manipulate the variables and **when in doubt, see if you can group "like" variables and terms**

eg. $\cos(x+1) = \sin(x) - \cos(x)$
 $\cos(x + 1) + \cos(x) = \sin(x)$
 $\cos(x + x + 1) = \sin(x)$
 $\cos(2x + 1) = \sin(x)$

b. These are all mathematical operations, like addition or subtraction:

1. \int 2. Σ 3. d/dx 4. $|x|$

Know them as such, and make sure you don't write them again after finishing the operation.

eg. $\sqrt{81} \neq \sqrt{9}$

3. Study for the SAT Math Section.

a. The most important part of the AP test is understanding what the question is asking. From there, calculus is easy. The SAT is similar in this way since the math section is a reading quiz to see if students know how to read an oddly worded question and answer it.

Overall:

1. If you are absent, just read the Section Chapter in the book or check out Berkson's review book.

2. The most important lesson in this class is the section on understanding and interpreting graphs. Everything else stems from that lesson. If you don't understand an equation or how it moves when you are practicing, or doing homework, get a graphing calculator, and analyze the equation.

3. Understand the lesson that day. Berkson typically goes over one lesson each day and does not repeat lessons. Ask questions and understand the concept she teaches before you walk out of 228. Homework just makes the lesson second nature.

Best,
Hunter Sonn

p.s. The exam is not subjective. There is a way to "cheat" Calc AB on the free response section by understanding where points are given to get the highest score possible (eg. Putting units next to your final answer where applicable)