

Taking a 7:30 calculus class requires lots of concentration, so it is very important to stay fully awake during lecture and especially during tests and quizzes. Try not to take any late night classes while taking an early morning calculus class for obvious health reason. Also missing a lecture class because you overslept is really bad for your learning in a class with such tight schedule because there are usually lots of material that one day's lecture covers.

One learning technique that I recommend everyone who wants to succeed when taking Math 1B to use is to organize notes after every lecture class. Lectures in Math 1B are fairly fast paced, notes I took in class were usually very messy, which makes them hard to study with. Organizing notes after lecture classes is a good way to sink in the materials that I just learned, and I would have organized notes that are easier to study from. I would also strongly encourage everyone to attend group tutoring sessions regularly. Asking any questions about homework problems is a great way to learn, but due to the tight schedule of the course, not everyone's question can be answered during lecture, so tutoring sessions provide those extra help and time to help answer questions. Also, others that are attending group tutoring may often bring up things I overlooked. The last recommendation I have to those that wants to do well in Math 1B is to do the assigned homework. This might sound like an obvious thing to do but it is very tempting to not do the homework when the teacher is not collecting them. Homework is very important because doing homework is the only way to practice. Understanding the lecture is really just understanding half of the material, I found myself running into problems that weren't directly addressed during lecture, clearing the confusions from the homework problems is understanding the other half of the materials in Math 1B.

One mistake I made that really hurt my chance of succeeding is I sleep late. I made many silly errors or even read problems wrong on tests and quizzes because I don't have enough concentration due to the lack of sleep. I also wasn't able to pay full attention during lecture sometimes because how tired I was. The other mistake I made was I didn't spend enough time on reviewing many of the prerequisite materials. Many of the materials from pre-calculus and trig appeared in 1B. Lots of the error I made on quizzes and tests was cause by how rusty I was with the prerequisite materials.

Personal Development Exercise: Math 1B -- Calculus II

Taking such an early class like Calculus II at 7:30 A.M. means that you got to commit to waking up early and staying awake during class. I normally get to school around 6:45 A.M. so that I have time to look over my homework and notes or to study for a quiz or midterm. By getting to school so early, I avoid traffic on the freeway, have time to prepare myself for class, and ensure that I will not be late to the lecture. By getting to class on time, or even early, really helps you focus on the material instead of just arriving in the middle of an example and having no clue as to what is being done on the board. I would highly recommend going to the midterm review sessions because you get to ask all the questions you have without being scared. Because there are only about six or less other people with you during these reviews, you should feel more comfortable to ask the questions that you've been dying to ask in class but never got the chance to do so. These reviews also have some extra clues and information that are not mentioned in class that could be helpful during the midterm on the following day. I would also advise that you ask questions if you don't understand something that is going on in lecture. Even though people generally don't like voicing out their confusion in front of a whole classroom, no one really cares because they might not understand the reason behind why something is added or multiplied either. By asking questions in class, you help clarify the material for yourself and for other classmates as well. In addition, I would recommend that you keep a rewritten notebook of the information and examples used during lecture. I took notes on loose-leaf binder paper in class, went home, and rewrote all of those notes in a much more comprehensive manner into a bound notebook. By doing this, I was able to study much easier because the material was color-coded in a way that allowed me to avert my attention to the important aspects of the section. Rewriting my notes also helped me remember and comprehend the material more because I was going over the examples and formulae more than just the one time during class. One mistake that I made during the beginning of this quarter was not going to the quiz corrections. We get to correct our own quizzes according to his rubric of points to each question, and if we have a discrepancy over whether we should get the points for a particular section or not, then we go to quiz corrections to appeal for our points. By going to quiz corrections, you increase your chances of getting more points because you will never get docked points for going to these sessions. Going to quiz corrections can also help you understand your mistakes better because you get to see what you did wrong and how you can improve in future quizzes. Another mistake that I made during this quarter was not putting my homework questions on the board in the beginning of class. During the first section of class, he goes over any problems with the homework questions according to what is on the board; however, if there is nothing on the board, then he assumes that no one had any trouble with the homework. I would highly advise that you put your questions on the board because some of those problems may appear on the quizzes and midterms. When you put your question on the board, you address that you had trouble with that problem, need help, get help, and may even get a problem on a quiz or midterm out of the way. These are some of my personal recommendations for achieving in this class so use my advice as you may find necessary. Good luck in all of your upcoming math endeavors!

The key to surviving in a 7:30am class is most obviously to sleep well. I had this issue for most of the quarter and when I was unable to do so I either missed class, bombed quizzes, or simply could not focus on the lectures. Elaborating on the bombing of quizzes, there were a massive number of simple mistakes that killed 10% of my score, all of this due to lack of focus. I say 10% because the other 10% (I usually obtained 80s) was lost due to lack of knowledge. So all in all, sleep well, and have some caffeine and do some calisthenics (push ups, sit ups) before coming to class. These benefited me greatly in the second half of the course.

Recommendations for success

- 1) Ensure that you understand all techniques that were covered leading up to a quiz. This will allow you to be versatile when approaching a problem that you are unsure of. In addition, knowing all of the examples covered in lecture is critical to understanding what may be on a quiz.
- 2) Work efficiently when it comes to quizzes and arrive to class 10 minutes early. Having a large amount of time to think is most optimal for success and a minute wasted can mean a point lost. Also, do not dwell too long on a problem you are unsure of, just skip it and return later.
- 3) Do some work every day to keep the material fresh in your mind. Leaving an entire assignment for the night before the next lecture will make your next assignment more burdensome. It also helps for studying to work a little every day.
- 4) Always look for uncertainties on quizzes that you can get partial credit on. Who knows, the key may be wrong or you deserve more points than you think.
- 5) Take the mistakes made on quizzes and make a pact with yourself to never make that mistake again. The quiz problems are not worth nearly as much as those on the midterms or the final. This is how I was able to score much higher on my midterms than my quizzes.

Don't make these mistakes

- 1) Do not study only the night before a midterm or quiz. This will cause stress and usually not be sufficient for much more than an 80% (unless you are amazing). Start a couple days before.
- 2) Never assume a particular problem will not be on a quiz. *IT WILL BE, I ASSURE YOU.* If you have that doubt, put some additional time into making sure you know it.
- 3) Study the definitions and theorems very hard and be able to recite them word for word. They are worth a large amount of points (easy points if you know them) and you basically just need to write it down.
- 4) Listen to Bert Lo, he does not lie about things. If he says anything in particular about a quiz or test, take it to heart, even make a note of it. Or 5 notes, just listen in class.
- 5) Do not underestimate this class or any for that matter. A lousy start will not only kill your grade, it will put you on tilt and cause you to do worse on the following quizzes. A

good start is great because the initial material is generally easier to do well on, so do it!

A)

Transportation:

I live in San Jose and the traffic to De Anza College begins to accumulate on highway 280 around 6:30 AM. If you live in San Jose, I suggest that you leave at 6:20 so you may get on campus around 6:45 AM. You may arrive around 7:30 if you decide to leave at 6:30. The ten minute difference makes a big difference on traffic.

Academics:

Do all the assigned homework, midterm reviews and attend the group meeting sessions. Also, make sure that you completely understand how to do the diagnostics quiz, it is very important.

B)

Increase Chance to Succeed:

1. Our midterms were based on the homework, midterm reviews and the diagnostic quiz. Make sure to do all the assigned work, otherwise you might feel silly if you happen to have exact same problems on an exam and didn't get full credit.
2. Memorize the FTC part 1 & 2 and the Net Change Theorem theorems and the definitions given in lecture. On an exam, a question might ask to state the definition but more importantly some questions might ask you to state the definition based on a theorems restrictions.
3. Attend all class lectures, some lecture notes are on the quiz. Lecture notes are your best reference for a problem and sometimes a method of doing a problem by Mr. Lo isn't covered in the textbook. So, seriously consider taking good notes.

C)

I didn't do all the assigned homework and Midterm Reviews. When it turned out that one of the exams had the exact problems from these assigned work, I felt embarrassed for not getting the full credit on the exam.

Also, I didn't take the diagnostics quiz seriously, and it turned out that some of the exams incorporated the key steps issued on the diagnostics quiz.

Taking a class at 7:30 in the morning is a really big commitment. There is absolutely no room for laziness. We all know getting up in the morning can be extremely difficult but that cannot play as an excuse for not wanting to come to class. This is especially true for Math 1B where every day's lecture is crucial to success on quizzes and midterms. It is also important to keep a good bedtime when you have such an early class. It really helps keep you be more engaged in the lecture.

There are also many other things you can do to ensure your success in the class. One of them is to always look at the posted quizzes from previous quarters to help you study. It helps you see the level of difficulty the quiz will most likely be. It also gives you a chance to see how prepared you are. Finally, it shows the point allocation so you know what is important to write down to get full points.

Another recommendation is to always ask questions during the lecture. This keeps you from daydreaming or simply just writing everything down without thinking about it. It also allows you to get some participation points in the end.

A third recommendation is to do the homework way before the quizzes and midterms. That way you have enough time to ask questions both in class and during office hours. It also helps you get practice with the material before the next topic, which usually builds off the previous topic.

In addition, always grade your quiz the day you get it back. That way you can ask for points during office hours on the first day and avoid the long line that happens the day before it is due. It also gives you a chance to see what mistakes you made earlier and then you can begin practicing to avoid those much earlier.

Otherwise you may continue making the same mistakes in your homework, and practice it wrong.

A final recommendation is to use the solution manual only when you have to. You need to learn how to practice the problems without looking for hints because that is how it will be on the quizzes and exams. However it is okay to use it when you are completely stuck, because then you will find the mistake you made, and learn not to make that again.

I made some mistakes throughout the quarter for sure. Because I live thirty minutes away from DeAnza and because of the traffic, I had to leave my house at 6:30 AM everyday. At least, that is how I started off the quarter. But toward the last four weeks, the number of times I was late suddenly jumped from zero times to six times. I missed up to five minutes of class each of those times, and those minutes are actually very important. I would end up missing the important announcements and also would not get a chance to write homework problems I needed help with on the board. That usually resulted in those questions never getting answered because my schedule tended to overlap with the office hours.

Another mistake I made was not doing all of the homework for the material on an upcoming quiz. This was by far the worst quiz grade I ever received in the class and it really showed me how much the homework helps. That time, I thought I could just do a quiz from before and be fine. However, the homework is a much better study tool because it gives a large variety of problems for more practice. If I did that, I would have gotten a much better grade on the quiz.

A mistake I saw others make is skip class when there was a quiz. It's important to remember that no quizzes are dropped! That means those students got a zero out of thirty. That had a significant impact on their grade because you can only use 100 points total to keep an A- in the class. It left them with only seventy points to go. And even though the last quiz makes up for some of those points, those people feel their grade would have been better if they did not miss the quiz.

Another mistake I saw others make is not come to the quiz or midterm at 7:20 AM. Every minute you get on the quiz is important because then you can ensure you got everything right by double checking the work. Many would come around the usual 7:30 AM but they wouldn't finish. It really impacted their score because they knew the material, they only needed more time.

Finally, many did not take the opportunity offered to get points back on the diagnostic quiz. It is very rare a teacher is willing to give back points on a quiz so they should have taken the opportunity. Not only did they miss out on important prerequisite material, but they also kept that bad grade on the quiz, which lowered their chances of an overall good grade in the class.

The 1st thing you must be ready to do in a 7:30 class is to get up early. Sometimes its really hard to get up, so what I did was download an alarm clock app for my phone, that let me change the settings so that I could only hit the snooze button a limited amount of times. This assured that I would get up, in time to get ready for each and every lecture. One thing you should always do, is arrive early for the tests and quizzes in this class. My class was offered 10 extra minutes of test-taking time when we got there early, and easily made our chances of doing well on the quiz/test much higher. Even if the extra 10 minutes aren't offered, this will ensure that you get all the time available, so instead of having 35 minutes to take the test because you didn't account for traffic, you will have the full 50 minutes. You also need to attend every lecture, even if you are sick or dead tired. In my experience, it is hard to learn out of any textbook, without the explanation of a lecturer. On rare occasions you might even miss something that is not even discussed in the book, like shortcuts for Partial Fraction Decomposition. In my opinion, it is most important to go to every group tutor session or to every session with Mr. Lo and his extra office hours. If you do not understand something, these are the opportunities to get them solved quickly, and not spend hours stressing over the same problem. Even if you feel like you know everything out of the chapter, you should still go. These sessions will reinforce what you already know, and someone might even bring up a question you haven't thought about yourself. One huge mistake that I heard another student make, is not doing the homework. It's fine if you are busy with other classes, and can't do it right away, but make sure you don't leave the homework for the day before a quiz or test! Half of the problems that show up on a quiz or test might not be covered in lecture, but only in the homework, so it is imperative you do all the homework. One mistake I have personally made is underestimating the first few weeks of class, because I had already learned part of the material in my previous calculus class in highschool. It might be easier than the future material, because it is review, but it is still important to study it as if it was new material. This is especially true for the diagnostic quiz, as it covers a lot of material that you may have forgotten since now.

Having a 7:30 am class is one thing, having Math 1B at 7:30 in the morning is a whole other matter. (1) Do what is necessary in order to get a goodnight sleep before exams. I for example take a nice warm shower, and drink some warm milk before going to bed in order to make myself feel relaxed, this has helped me stay focused during a quiz. This will make it easier for you to feel fresh and confident to take an exam because your body is not tense, and you will prevent yourself from panicking. A student will be more successful if he/she has had a good night sleep, than one who lacks sleep but drinks coffee in the morning. (2) If going to bed early is not available due to work, or other extracurricular activities, be consistent in the hours of sleep you obtain so that your body is accustomed to having less than 8 hours of sleep. This will insure that your body is awake at 7:30am. If you have a tendency to sleep at different hours everyday you will find yourself tired and exhausted and not willing to pay attention to lectures. (3) When doing the homework, do all the problems assigned as well as some of the challenging problems that may not be assigned, but will test your comprehension of the material at hand. By doing more challenging problems, this will enable you take on any problems that may be given on an exam. Just doing the easy simple will not benefit you in any way. (4) When doing Calculus do not attempt to memorize every formula and plug and chug everywhere (Just blindly applying a formula), but understand the material at hand. By understand a concept you will find it easier to remember the formulas because you wont see them as just random variables that you switch out. If on an exam you forget a formula, your understanding of the concept will enable you to derive it yourself. (5) Work in groups when doing homework. By working in groups this will enable you to understand the material better because by struggling with your classmates you will master the material more efficiently than with someone who tells you all the answer. By working in a group this will enable you to get questions that you would be able to get answered working alone. (6) If you have extra curricular activities that may conflict with quiz days, contact Professor Lo in advance so that he will move possible midterms. Professor Lo doe not bite so don't be afraid to ask, he understands that your world does not center around Math 1B he will make the arrangements so that your grade suffers least. His quiz and midterms dates are not set in stone so don't assume that u have to change plans because u will miss a midterm or quiz.

(1) One mistake I made in this course was to do the "Take Home Quiz" on the Sunday of that weekend. I underestimated it and in turn spent hours the night before it was due tired, trying to receive a perfect score, and did not. Don't procrastinate on quizzes that are open book because you never know how long it will take you to complete it. (2) Another mistake that I advise students to take in consideration is to not fall for "Im going to sleep 10 more minutes". By doing this I have occasionally been late for class, or been extremely tired for lecture. You might assume that these few more minutes of sleep are harmless but it tricks your body that it is time to sleep which in turn make you drowsy. (3) A mistake that I found affected me was not taking detailed notes during lecture. Just copying everything Professor writes down, wont give you the best notes ever because he might erase- or skip steps that he might believe is easy but might not be for you. Copying

someone else's notes might make the same effect because they might write things that you might think are important. (4) I did not believe that understanding fully all the material from prior courses would affect me. By not understanding full all prior material there were times where I had to re-master old material. This forced me to go to tutorial sessions in order to understand concepts I should of known before. (5) I would do homework with music or a movie playing in the background. This is a very unadvisable action to do because Calculus takes a lot of thought processes, and if your multitasking by watching something or listening to music, you will take longer to understand something or finish hw. By also making sure that your browser is off you will not be distracted by Facebook, and YouTube.

- a. Advice on how to succeed when taking an early 7:30 AM Calculus class
 - a. **Get a good night's rest.** This is critical not only to being able to get up in order to be to class on time, but also to so that you can concentrate and understand the material being taught. When you're awake and able to understand the material, you will be able to remember better and ask questions if there is anything you don't understand.
 - b. **Plan your mornings ahead.** If you have trouble getting up and getting to class, get ready as much you can the night before: get your clothes ready, pack your bag, and make sure you have everything you need ready for the day so you aren't scrambling around in the morning. Allow yourself enough time to leave by working back from when class starts to when you need to get up, get ready, and leave. If you need thirty minutes to drive to class, twenty minutes to get ready, and it takes ten minutes to get out of bed, you will need to wake up an hour before class starts.
- b. 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful
 - a. **Frequently review the material.** By frequently reviewing the material, you will be able to stay comfortable and remember it. Spacing out studying and homework through the course helps to avoid a last-minute cramming session before a test and reduces stress.
 - b. **Ask questions in class or in office hours.** These are the only times where you can ask the teacher your questions and get help (besides a study group). If you are struggling to understand a concept or cannot figure out how to solve a problem, be sure and ask. Who knows, you might just see it show up on a quiz, midterm, or the final.
 - c. **Complete the homework as soon after the lecture as possible.** This helps you practice the section while it is still fresh in your memory. If you wait too long to start the homework, you won't be as familiar with the content and struggle.
- c. 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your (their) chances of succeeding, and why specifically each one had a negative impact
 - a. **Avoid missing class whenever possible.** The class moves fast and the material builds off of itself. Missing one day creates a snowball effect with being lost and slowly falling more and more behind if you do not work hard to catch up.
 - b. **Not being part of a study group.** This can cause challenges and make the studying and homework processes a lot more difficult than they have to be. Not only do study groups let you ask your peers questions if you're having trouble, but you can collaborate with them and each provide different perspectives and piece together solutions for difficult problems. Not being a part of a study group left me on my own much of the time to study and I wasn't able to solve some problems by myself.

Personal Development Exercise

a) When taking an early 7:30 am class, it's important that you get a good night's sleep before class. If you have gaps in your schedule, it's a good idea to read up on material taught the same day and finish the homework as completely as possible. This leaves more time to review and relax when you get home.

b) 1) One way to increase your chance of success is to review the material taught in class on the same day. Even though homework isn't collected, it's important to do the homework and review the notes while the concepts are still fresh in your mind. The fact that it's a daily class allows students to constantly be on their toes, and it's important to learn and understand the material as quickly as possible.

2) It is also important to thoroughly and continuously review the notes and handouts on Mr. Lo's website. Since the class is fast paced, it's important to keep reviewing old material, making preparation for the midterms a lot easier to handle. By avoiding large gaps in reviewing old material, the concepts will be fresh in your minds, and will making learning newer concepts faster and easier.

3) A 3rd strategy for success in the class is to practice math problems, especially from the workbook. Doing homework isn't enough, since the homework doesn't encompass various problems of different difficulty levels. For instance, doing every single odd problem in a section that is difficult exposes you to different types of math problems regarding certain concepts. This repetition of practice and using concepts learned in class strengthens your concepts and quickens your math skills, especially algebra.

c) 1) One mistake I made was not making use of the group tutoring sessions. The sessions should be used to gather input from the tutors as well as other classmates, regarding the material taught and reviewed. The tutoring sessions also allow you to ask your personal questions in a smaller classroom setting. This heavily impacted my grade as certain doubts were never cleared and the same mistakes I made on the homework were continued on the exam.

2) Another mistake I made was not using Mr. Lo's resources to the best possible way. The handouts on the website were clearly written and helped guide students, so I lost valuable resources by not using them effectively. In the end, this gave me a limited scope of the concepts and I came out with less understanding of the material. It is extremely important to use all the resources and find your own, as math can be represented in various ways.

a) Just get used to waking up at 7:30. It's not easy at first, but you will have to do it or your grade will suffer. Every Friday, learn to get up 30 minutes early so you can get to class 10 minutes early for every quiz. You may not like it in the morning, but you will hate yourself even more if it turns out those 10 minutes would have saved you 2 (or more) letter grades.

b) 1) It's more than likely that your mind is not fully awake by 7:30. You're not alone, but you don't want to be a part of the crowd whose grade suffers because of it. What I did was that I would incessantly keep asking questions on anything that I had even a shred of doubt in. Not only did this clear up a lot of the things that I did not know from before, but it kept me engaged in the class and I absorbed a lot more material.

2) If you don't get the material, do the homework, go over the lecture, and go to his office hours. I thought I was doing fine because I was getting 29's and 28's out of 30 on his quizzes, so I didn't do my homework and I got 2 D's. If you get the material (like you really get it), you can slack on the homework a little bit. You should still be reviewing for every quiz, but if you don't understand the material, do the homework, go over the lecture, and if you still don't know how to do it, ask Mr. Lo where you're going wrong. He's a great teacher and I can guarantee he will clear any of your doubts by the time he's done with you.

3) Don't stress too much about notes that you've missed. Instead understand the intuition that Mr. Lo is trying to teach. Obviously if you're reviewing the material 2 days before the quiz (the minimum time for when a quiz is announced), then you can identify anything in your notes that confuses you and clear it up.

c) 1) My friend left the class for a weekend, which pretty much gave him a 0/30 for a quiz. He did not get a make-up or anything. Instead, the quiz is "dropped" because of the total quiz category is 30 less than it should be (it's somewhat of a curve, but not really). He really didn't need to go on the trip at the time, so it was really detrimental to his grade. You have a possible 270 points to gain and he's letting you get above 100% in quizzes so you can make up for any mishaps on the midterms.

2) My other friend did badly on his first midterm. Obviously this is bad because doing badly is bad, but even more than that, he could have averaged any later bad midterm scores with his midterm 1 grade, but he threw away the opportunity because he did better and if he did worse, he'd barely benefit from the averaging (if it sounds confusing, it's all on his green sheet under midterms). Study hard for midterm 1!