

AMS 3: Precalculus.

Instructor: Bruno Mendes
mendes@ams.ucsc.edu, Office 141 Baskin Engineering
Teaching Assistant: Jing Chang(jxchang@ucsc.edu)

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Required Text

Cohen, D. (2005), Precalculus, Sixth Edition. West Publishing Company.

There's a customized version of this book for UCSC students, you might want to check it out at the bookstore because it's cheaper. Do this as soon as possible because the Math department uses this book also and they have hundreds of students that buy all the books from the bookstore very quickly.

There will be a book on reserve at the Science Library.

Lectures

Kresge Classroom. Tuesdays and Thursdays from 4:00pm to 5:45pm.

Discussion sections

Discussion section 01A to be held at Soc Sci 1 145 on Mondays, from 3:00-4:40pm.

Discussion section 01B to be held at Soc Sci 1 145 on Wednesdays, from 8:00-9:10am.

Discussion section 01C to be held at Soc Sci 1 149 on Thursdays, from 12:00-1:10pm.

Discussion section 01D to be held at Soc Sci 1 149 on Fridays, from 2:00-3:10pm.

Sections are **not** optional. They are part of the requirements to pass this course and attending them is paramount to getting a satisfactory result.

There will be a quiz during all sections. This is a way to reward the students who take the time to come to sections and, at the same time, to allow them to see how they are doing in class.

Office hours

Tentative schedule. Please get in touch with us in case you cannot make any of the times below. Office hours are an important part of the learning process, and we want to make sure that everyone has access to at least one of the office hours sessions per week.

Bruno: Tuesdays from 11 to noon and Fridays from 2.00pm to 3.00pm at Jack Baskin building, room #141 or Jack's Lounge (I'm usually in one or the other).

Teaching Assistant: Wednesdays from 3 to 4pm.

Tutoring

This class has free tutoring support from MSI (Modified Supplemental Instruction). More news during lectures. Their web site is at:

<http://www2.ucsc.edu/lss/msi.shtml>.

More tutoring services can be found at
www.cse.ucsc.edu/advising/undergraduate/current/tutor.html

It is our experience that students do not use tutoring sessions (for one reason or another, most quite un-rational) although they need it badly. In order to motivate you a little further to make use of them, I am allowing students who attend at least 5 sessions to drop second worst score in quizzes and homework (everyone in this course is allowed to drop the worst score by default).

Quizzes

There will be one quiz per section, they will be very easy and short; the intention is to both reward the students for attending section and also to give everyone an idea on how well they are doing on a very basic level.

Quizzes will account for 10% of the final grade. You will be allowed to drop the lowest score.

Any questions regarding quizzes's scores or grading should be addressed to the TA.

Homework

There will be one set of homework problems per week. They will always be due on Fridays by 5:00pm. There is a drop box at one of the entrances to Jack's Lounge (see map on the course's web page).

Whenever possible, homework solutions will be posted in the glass showcase at Jack's Lounge shortly after the deadline. The scores will be posted on the course's web site.

Graded homework will be given back in sections.

The average of homework will account for 10% of the final grade. You will be allowed to drop the lowest score (you will also be allowed to drop an additional worst homework score in case you complete more than 5 tutoring sessions).

Any questions regarding homework's scores or grading should be addressed to the TA.

List of priorities when working on homework:

1. Understanding each problem. This includes checking the corrections and solutions when you get your homework back. If there's anything you don't understand, talk to us about it, don't let any problem go by!
2. Try to complete as much of the homework list as early as possible. If you can't do it before the deadline to hand the problems for grading, just give us whatever you did by the deadline, but remember, your work is not finished yet; finish all the problems, even if after the deadline.
3. If you have difficulties in a particular set of problems, choose extra problems and work on them together with Bruno, the TA or your favorite tutor.

4. By the time you get to the exam, make sure you understand all the problems in the homework list.

Midterms

The first midterm will take place on Thursday, February 7th, in class, and will cover all that was taught just before the date of the exam (emphasis on problems from Appendix B, section 1.1 through 2.4).

The exam's score will contribute 15% to the final grade.

The second midterm will take place on Tuesday, March 4th, in class. It will cover all that was taught up to that day (same emphasis as midterm 1 with exponentials and logarithms added to it).

The exam's score will contribute an additional 15% to the final grade.

These are multiple choice exams, so bring a scantron Parscore form nr. f-1712 (you can buy them at the bookstore). The only other material you are allowed in the exam is a nr.2 pencil and an eraser. **No calculators.**

Official solutions will be posted in the glass case at Jack's lounge at Jack Baskin's building just after exams.

The final will include problems of the same type as the ones in the midterms (ie. the final will include all what was taught in the quarter), so make sure you understand all the mistakes you (eventually) made in the midterm, so that you don't repeat them in the final!

Any questions about the scores on the midterms should be addressed to Bruno.

Final exam

It will take place on Friday, March 21st, from 4:00-7:00pm at Kresge Classroom (double-check at <http://reg.ucsc.edu/soc/2080/sched.htm#Winter2008>).

The exam will cover **all** that was taught during the quarter ¹.

This is a multiple choice exam, so bring a scantron Parscore form nr. f-1712 (you can buy them at the bookstore). The only other material you are allowed in the exam is a nr.2 pencil and an eraser. **No calculators.**

The exam's score will account for 50% of the final grade, also (and very important!) you will need a minimum of 66% in this exam to pass the class. Even if you have a good overall average grade.

Any questions about the scores on the final should be addressed to Bruno.

Passing this class

The final grade is calculated with the following formula: $0.1 \cdot (\text{average homework scores}) + 0.1 \cdot (\text{average quiz scores}) + 0.15 \cdot (\text{first midterm score}) + 0.15 \cdot (\text{first midterm score}) + 0.5 \cdot (\text{final exam score})$.

You will have a C (or a 'Pass') if you have at least 66% as your final score **AND** at least 66% in the final exam.

¹Once more, having looked carefully at your answers in the homework problems and midterms will be a good guide to preparing yourselves for the final exam.

These requirements are not so tough if you work hard during the whole quarter and stay engaged in sections, office hours and tutoring sessions. Most of the students who stay engaged end up having a very good grade and even enjoy the class. Most of the students that don't pass this class are, unfortunately, the ones that do not seek help in the questions they do not understand in homework or midterms, or the ones that think they got a 65% in the midterm and tell themselves they were just unlucky and next time they will have that missing 1% (when in fact they are missing 35% of the whole material, right?!).

Course's web page

Address: <http://www.soe.ucsc.edu/classes/ams003/Winter08/>

The web page will contain the list of homework due, score list (updated weekly) and most likely some notes from the lectures. It will also contain any announcements related to the course and all the information related to it.

Protected material can be accessed by using the following information,

username: ams003 password: dress47 (for the Winter08 web site) and wists77 (for the Fall07 site)

Class Rules

No type of collaboration between students is allowed in quizzes, the midterm or the final exam. Not complying with this rule will initiate a very unpleasant procedure for both the students and us, so please don't let yourself get to the point where illegal collaboration becomes an option; start working from the first day of class and stay engaged with us in sections, office hours and tutoring sessions.

You can work together on homework, but 'carbon copies' are not acceptable.

Always substantiate any answer you give to any question in this class. Even "true" or false" answers have to be justified, either with words or calculations.

Not complying with these rules will affect your grade considerably.

Late homework is never accepted. We have a system set up for grading homework: graders pick them up on Fridays at 5pm sharp and we publish the solutions also at that time, accepting late homework will affect negatively the way the system works. But don't forget that the main goal of homework is to get it done, not getting it graded (even though we can all agree getting both is the ideal!).

How to improve your chances to get a good result in this course

Take as much advantage as possible of the **office hours**. They are a wonderful opportunity to get practically one-to-one tutoring. I (the TA and MSI tutor) will be able to pay closer attention to you individually and therefore help you more efficiently.

Unfortunately our education system still expects the students to arrive at this school with good strategies for working/studying, and the sad reality is that many times they don't. In fact, there is a resource that I strongly advise all students to take, it's a set of workshops that (in my opinion) should be compulsory to all students since they are so useful; more information at <http://www2.ucsc.edu/csas/#workshops>.

Although we are very well aware that each person is an individual and running the serious risk of sounding paternalistic, allow us to give you a few ideas on how to improve your studying of mathematics.

- Read the book. Many people give up after a first read of the book, giving in to frustration. Please keep in mind that no one expects you to understand everything on a first read. No one can do that. Most typically a student needs to read the material two to four times until he/she starts feeling comfortable with the new concepts.
- Study the examples. These are the "doors" that lead to the solution of most of the problems assigned for homework. It is almost pointless to tackle homework and quizzes if one doesn't understand the examples. The usual procedure should be to re-read the theory in case you have difficulties with a specific example.
- Work out the problems given in the book. Feel free to do as many as you feel like. Start with the easy ones first. If you have problems, go back to the examples, maybe you just skipped something important.
- Organized work. Be organized and write down your calculations in a clean and ordered way, problem solving is much simpler if one has organized, clear calculations. Usually "messy writing" \implies "messy thinking".
- Make full use of lectures, sections, office hours and labs. Don't be afraid to make questions. The more you interact with the teachers the more likely you will be able to absorb more knowledge. Come to us as many times as are necessary!

You can and you **should** come to Bruno (the TA or the MSI tutor) for help during any of the stages described above, but you'll be able to take more from our meetings if you have gone through the first items in this list on your own at least once.

I look at this course as a team work and the main goal of all of us is to help you learn mathematics and help you have a good final grade.

I welcome you to this course and we hope that by the end of it you feel that you have learned something useful and at the same time had some fun doing it!