Math 1A: Calculus I (MPS) Syllabus Spring 2022



Course Statement

Welcome to Math 1A MPS! Many of you have probably heard about Calculus before, but probably don't know what it is all about. Calculus in a nutshell is about the study of functions and learning about tools used to analyze these functions. Just about every field in STEM uses some idea of Calculus to help answer questions. How are rates of change in the economy calculated? How are 3D images formed and

Course Information

Instructor: Mr. Andrew Lazar (he/him/his) Answers To: Andrew, Mr. Lazar, Professor Lazar Lecture: MTWTh 1:30 PM – 3:45 PM Office: S 33-N Phone Number: TBA E-Mail: <u>lazarandrew@fhda.edu</u> Student Hours: MTWTh 11:00 AM – 12:00 PM (or by appointment)

MPS Information

MPS Counselor: Mr. Sheldon Fields Answers To: Sheldon E-Mail: fieldssheldon@fhda.edu Phone Number: (408) 864 - 8962 Office Hours: By appointment

MPS In-Class Tutors

Tutor: Nick Perematko **Contact:** Message through Canvas **MPS Lab Hours:** TTh 4:00 PM – 6:00 PM (via Zoom)

analyzed? How do we look at behaviors of certain systems over an infinite amount of time? These are just a few of the questions that can be answered when studying calculus. This course is the first course in our Calculus sequence. We will learn about limits and continuity, differentiation, and parametric equations in this course. I look forward to guiding you through your first calculus course and I am happy to help you along the way. Here are some tips for success in this class:

- Be on time to class and always feel free to ask questions.
- Attend student hours regularly and/or utilize free tutoring services.
- Keep in contact with our MPS Counselor and utilize the valuable resources MPS has to offer.
- Keep up with material, many of my previous students suggest the best thing to do is "don't procrastinate"
- When sending emails to me, please identify yourself and the course you are enrolled in.
- It may be helpful to form a study group with fellow students in the course.

Good luck! Keep communicating with me. I want you to succeed!!! Math Performance Success (MPS)

This Math 1A course is a part of the MPS program here at De Anza College. Here is the mission statement from the MPS website

"The Math Performance Success (MPS) program aims to help all underrepresented students meet their goals by improving student success in math through innovative and collaborative approaches including extended lecture time, in-class tutoring, and embedded counseling services."

Our course has access to a wonderful team of people to help you succeed. We have an in-class tutor dedicated to helping you out during problem-solving portions of class. We also have an in-class counselor who is here to help and support you through your math journey.

As an MPS course, we have a longer than normal class time, so here is a breakdown of a typical day in class

- 1:30 2:30 PM Lecture
- 2:40 3:45 PM Problem-Solving Activities

We have an awesome team here to help you through this course. Please feel free to reach out to us at any time with anything you need for this course.

Text

Calculus Early Transcendentals, 9th Edition by Stewart

No textbook purchase is required for this course. MPS will provide an access code for WebAssign which contains access to the e-book version of our text.

WebAssign Course Key: deanza 3330 2611

Course Materials:

- A graphing calculator is allowed for this class. If you do not have one, you may use a scientific calculator or you may use Desmos online graphing calculator. (MPS will provide you a calculator if you need it).
- A computer (6 years old or less is recommended)
- Binder or Notebook for notes

Grading:

The following list of assignments will make up your grade in this course.

Assignment	Weight
Homework/Quizzes	30%
Exams (3)	45%
Discussion	10%
Worksheets/	
Participation	
Final Exam	15%
Total	100%

Grade Scale:

This course will be graded on a +/- scale.

A+: 97 - 100%, A: 93 - 96.9%, A-: 90 - 92.9%B+: 87 - 89.9%, B: 83 - 86.9%, B-: 80 - 82.9%C+: 77 - 79.9%, C: 73 - 76.9%, C-: 70 - 72.9%D+: 67 - 69.9%, D: 63 - 66.9%, D-: 60 - 62.9%F: < 59.9\%

Course Assignments:

- <u>Homework Assignments</u>: Homework will be assigned weekly and completed using WebAssign. You can access WebAssign on our course's Canvas page. Homework is so important for this class as it is your opportunity to practice and perfect the skills taught in this class. I happily welcome questions in student hours and over e-mail. You will have about one week to complete homework assignments and will typically be due about twice a week.
- **Quizzes**: Quizzes will be assigned on a semi-weekly basis for this class. Some quizzes may be online through WebAssign and some may be handwritten. These quizzes are an opportunity to assess your learning prior to an exam.
- <u>Discussion Worksheets</u>: On most days after lecture, we have a 1-hour portion of class dedicated to working on example problems based on the day's lecture. You will complete these worksheets in groups. They will be turned in at the end of each week. These will be graded based on completion, effort, and some emphasis on correctness.
- <u>Midterm Exams</u>: Exams are my opportunity to assess the learning that has happened in this course. Exams will be given in two portions (1) a WebAssign portion and (2) a handwritten portion that will be turned in on Canvas. Do note

that even though a portion of exams are on WebAssign, you will most likely need pen and paper while working on the midterm. There will be three midterm exams. On each exam you will be allowed a half-sheet, 8.5" x 5.5" (front and back) of notes. On exams you may use your calculator.

• <u>Final Exam</u>: There will be a cumulative final exam given on **Tuesday**, **June 21**, **2022**, from 1:45 PM – 3: 45 PM. You must take the final exam to pass this course. You will be allowed 1 page (8.5"x11") front and back of notes and your calculator.

Exam Dates:

- Exam 1: April 28
- Exam 2: May 19
- Exam 3: June 9
- Final Exam: June 21

Canvas and Contact Information

The course Canvas page will be where I post documents related to the course including homework, syllabus, schedule, labs, etc. It will also be where I post course announcements. I can be contacted through the Canvas inbox and through e-mail. You should be visiting the Canvas page frequently throughout the week.

The best way to contact me outside of class is by email at <u>lazarandrew@fhda.edu</u>. During the week, I typically respond to emails within 24 hours. On the weekend, I will respond within 24 - 48 hours.

Course Description:

This course covers the fundamentals of differential calculus.

Attendance:

Regular attendance is highly encouraged to achieve successful outcomes in this course. I will take attendance via a sign-in sheet at the beginning of class. On the event you should miss class I encourage you to review the posted lecture notes on Canvas and if needed set up an appointment with me to discuss any questions. If you are sick, please do not come to class. I want to make sure the health and well-being of all students is prioritized in this class. If you need to miss a day because you are sick, we can always catch you up.

Civility and Non-Discrimination

I am excited to have students in my class and am always willing to teach and guide them. Students are expected to maintain respectful behavior toward fellow students and the instructor. A benefit of being a part of this college is being surrounded by individuals of all perspectives, genders, ethnicities, faiths, cultures, and backgrounds who are pursuing their educational goals. All of you are making personal sacrifices to be here and I want those sacrifices to be respected and worth it. I request that we all work together to maintain a class environment that is civil, respectful, and free of discrimination.

Academic Integrity

Here at De Anza College, your work is valued. Academic integrity standards of the college will be held in this classroom. You are responsible for knowing and following the college's academic honesty policy, available <u>here</u>. Furthermore, cheating on an exam or quiz will result in a "0" score on that exam or quiz. If it is on an exam, your final cannot be used to replace the score.

Dropping The Class

The last day to <u>Add</u> a class is **April 16, 2022**. The last day to <u>Drop</u> a class is **Sunday**, **April 17, 2022**. It is the students' responsibility to add/drop classes by the deadline.

The instructor reserves the right to drop students who...

- Have missed the first day of class.
- Have missed at least 2 days of class within the first two weeks of the quarter without notifying the instructor.
- Have not registered for WebAssign within the first week of the quarter.

Special Accommodations

I want to maintain a classroom environment where all students are supported, no matter their needs. If you require any special accommodations for a disability, please let me know as soon as possible so we can take the appropriate measures to help you succeed. You should also contact <u>Disability Support Services</u> to make your request.

Additional Services and Resources:

- **Tutoring:** The university offers free tutoring through the following programs.
 - MPS Tutoring Services
 - <u>Student Success Center (SSC) Tutoring Services</u>
- MPS Counseling
- Health and Mental Health Services: The college offers many <u>health services</u> and provides free <u>mental health services</u> to all students. If you require these services, the department is available for confidential help.
- Library Resources
- <u>Student Resources</u>

Final Notes

As your instructor, I want you to succeed. If you feel you are falling behind in the class or feel you are struggling, I encourage you to talk to me as soon as possible. We can then work together to set up a plan so that you can succeed. Remember, I am on your side.

Regarding late work, I understand the need to turn in late work can happen for a variety of reasons. The best approach for a situation like this is to communicate with me so I can support you. Homework and labs are due once per week. The best approach to completing these is to keep pace on the assignments. This will help digest material with deeper understanding.

With the understanding that the best approach is to keep up with work, I understand life happens and submitting an assignment by the due date is not possible. Please do not be worried about this, the following safeguards are here to help in cases like this:

- 2 lowest homework assignments will be dropped
- 2 lowest discussion worksheets will be dropped
- Your lowest exam score, will be replaced by your final exam score (if your final exam score is greater)

Important Dates

- April 16 (Last day to Add a class)
- April 17 (Last day to Drop a class)
- April 29 (Last day to request Pass/No Pass)
- May 27 (Last Day to drop classes with a W)
- May 28-30 (Memorial Day Weekend)
- June 20 (Juneteenth Holiday)
- June 21 (Final Exam)

This syllabus is subject to change at the instructor's discretion. All changes will be announced in class and on Canvas. It is the student's responsibility to note announced changes to the syllabus.

Schedule

Week	Sections
1	Section 2.1
4/4 - 4/8	Section 2.2
2	Section 2.3
4/11 – 4/15	Section 2.5
	Section 2.6
3	Section 2.7
4/18 - 4/22	Section 2.8
4	Section 3.1
4/25 - 4/29	Section 3.2
	Exam 1: April 28 (Sections 2.1 – 2.8)
5	Section 3.3
5/2 - 5/6	Section 3.4
	Section 3.5
6	Section 3.6
5/9 – 5/13	Section 3.9
	Section 3.10
7	Section 4.1
5/16 – 5/20	Section 4.2
	Exam 2: May 19 (Sections 3.1 – 3.10)
8	Section 4.3
5/23 – 5/27	Section 4.4
9	Section 4.5
5/30 - 6/3	Section 4.7
	Section 4.8
10	Section 4.9
6/6 – 6/10	Exam 3: June 9 (Sections 4.1 – 4.8)
11	Section 10.1/10.2
6/13 - 6/17	Review
12	Final Exam: June 21 (Cumulative)
6/20 - 6/24	

Student Learning Outcome(s):

*Analyze and synthesize the concepts of limits, continuity, and differentiation from a graphical, numerical, analytical and verbal approach, using correct notation and mathematical precision. *Evaluate the behavior of graphs in the context of limits, continuity and differentiability. *Recognize, diagnose, and decide on the appropriate method for solving applied real world problems in optimization, related rates and numerical approximation.