MATH 1A-02Y – Fall 2022 CALCULUS I CRN 01478, Classroom MTWTh 9:30 –10:20 AM

Instructor: Ms. S. Arabhi (pronounced AA-rub-hee)

E-mail: I PREFER emails directly from canvas; [I DO NOT want direct emails to arabhisundararajan@fhda.edu]

Prerequisite: Math 43 with a grade of C or better, or equivalent placement.

Required material:

- 1) Calculus: Early Transcendentals (9th edition) by James Stewart
- 2) Scientific Calculator
- 3) Graphing calculator (TI-83/ TI 84).[You may not use any calculators which do symbolic mathematics (eg. TI 89/92/Nspire)] {Cell Phone/ipad/smart watch calculators should never be used for calculations}
- 4) Online HW/ Webassign is NOT REQUIRED in my class. HW will be written from textbook questions.

CONSIDERATIONS BEFORE BUYING BOOK:

The format in which you purchase your textbook is your decision – print (new or used 9th edition) or e-book. When deciding, please be aware that a subsequent instructor may require WebAssign for Math 1B, Math 1C, 1D.

Course Objectives: (This is not an exhaustive list.)

To review selected topics in Pre-calculus. To learn the concepts and techniques of differential calculus and use them in solving applied problems. To study limits, continuity, differentiation and application of the derivative. Chapters 1, 2, 3, 4, 10.

Homework:

- Reading assignments & problems from the text will be assigned in every class and it is your responsibility to solve the problems and keep a written record. We will discuss solutions to some problems, but not all.
- Written Homework will be due on (a) **exam days** and (b) when I <u>finish a chapter</u>. You are encouraged to work in groups, but do not copy each other's work. There is NO ONLINE homework in my class, but if you have a WebAssign code, you can practice problems on your own and you will have access to the e-book. The course key for my class in WebAssign is WA-PRODUCTION-1193925.
- Each section will be worth 2 points. NOTE that in the written homework, answers must have supporting work to receive credit! (Answers alone will receive a 0 score.)
- I will <u>not</u> accept homework on paper torn from spiral notebooks. Also, staple or use paper clips to hold your work together. Please do not fold the corners. LATE OR ILLEGIBLE HOMEWORKS WILL NOT BE ACCEPTED.
- Please also go over the Homework Dos and Don'ts handout thoroughly. Please find out about any missed work, assigned homework from canvas or a friend, if you are absent from class. Do not ask me for missed work.

Special Quizzes (Tutorial): (10 points each)

As a preparation and review for exams, a set of questions will be given in class, and you will be allowed to work in groups. You must turn in the solution at the end of the class. These quizzes are special because I will assist you in solving the problems. These quizzes will assess your understanding of the material taught in class, as well as encourage you to work in groups. These will also help you review for the exam next day. The quiz will be closed book, so you should be prepared with the material. **Don't miss these - there will be no make-ups for these.**

FRIDAY Recorded Video and check-in online quiz (2 points each; due Monday at 9:30 AM): No class on Friday, but you have to watch recorded videos posted every Friday and take an online check-in quiz on Canvas. These are short, 5 minute, quick online quizzes – take them on canvas after watching each section video. These can be considered as checks to see whether you understood the particular section. Two lowest check-ins will be dropped.

Quizzes:

There will be a quiz every Thursday at the end of class (10-15 minutes) related to the material taught the previous Friday, Monday, Tuesday & Wednesday. Do your reading and homework every day, to fare well in these quizzes. Don't miss any of these since there will be NO MAKE-UP quizzes. I will drop three lowest quiz grades at the end of the semester, so if you are absent during a quiz, the absent quiz could be your dropped quiz.

Exams

Exams are primarily based on homework, problems from quizzes, and solved problems in the textbook. So the best way to prepare for exams is to sincerely do all the homework, read the book, learn from your mistakes in the quizzes, and clear all your doubts as soon as you can. There will be four written exams (50 minutes) and a final exam (2 hours). **THERE ARE NO MAKE-UPS for EXAMS.** However, I will drop lowest of four exams. It is your responsibility to let me know as soon as possible (within 24 hours) if you are going to miss an exam (via phone, e-mail, note, in-person etc.) and provide "valid" reason and documentation for the absence. FINAL EXAM IS SCHEDULED FOR Tuesday, December 13th from 9:15 AM to 11:15 A.M. **Final exam is mandatory and will not be one of the dropped exams**, and if you cannot take the final exam at the scheduled time and date, please do not enroll in this class. The final exam will be CUMULATIVE, i.e. it will contain everything covered during the course.

Please refrain from wearing hats/ caps to exams and quizzes.

Class Participation & Attendance:

Attendance is strongly emphasized, and class participation is actually part of your course grade. There will be pop/surprise quizzes at any time/any day. Study every day and be ready with any questions you have. I always encourage class discussions. My classes always begin promptly, so I ask that you be on time. Students who attend regularly and show up on time to my classes are almost always successful. I may drop a student from the class if they are absent 4 or more times or miss a major exam. (But do not assume if you stop coming to class, you will automatically be dropped. You are responsible for dropping yourself out of this class). I will also drop any student who, in my judgment, is habitually disrupting the class. Please switch off all noise making devices and wait to text until after the class ends.

Grading:

| Class Participation | 15 Points | M, T, W, Th in-class | |
|---------------------------------|-----------------|--|--|
| Quizzes (5 points each) | 30 Points | (almost) Every Thursday (end of class) | |
| Homework (2 points per section) | ~50 Points | Due on exam day & at end of chapter | |
| Check-in Quizes | 12 points | Due Mondays 9:29 AM on Canvas | |
| Special Quiz (10 points each) | 40 Points | See calendar | |
| Extra credit Pop quizzes | Up to 40 points | Any day, any time during class | |
| Exam 1 | 50 Points | THURSDAY, OCTOBER 6 th | |
| Exam 2 | 50 Points | TUESDAY, OCTOBER18 th | |
| Exam 3 | 50 Points | TUESDAY, NOVEMBER 8 th | |
| Exam 4 | 50 points | TUESDAY, NOVEMBER 29 th | |
| Final Exam | 100 Points | TUESDAY, DECEMBER 13 th | |
| | | 9:15 AM to 11:15 AM | |

Total Points: \sim 397 to 437

* IF YOU MISS ANY CLASS, LOOK IN CANVAS or ASK YOUR CLASSMATES FOR THE MISSED WORK. PLEASE DO NOT ASK ME. *

<u>Letter Grade</u>: I do not curve. Course grades will be determined on a standard scale:

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\geq 97\% \Rightarrow A+ 94 - 96.9\% \Rightarrow A 90 - 93.9\% \Rightarrow A-87 - 89.9\% \Rightarrow B+ 84 - 86.9\% \Rightarrow B 80 - 83.9\% \Rightarrow B \rightarrow 77 - 79.9% \Rightarrow C+ \rightarrow 70 - 76.9% \Rightarrow C \rightarrow 67 - 69.9% \Rightarrow D+ \rightarrow 64 - 66.9% \Rightarrow D \rightarrow 60 - 63.9% \Rightarrow D \rightarrow 59.9% \Rightarrow F
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Additional NOTES:

- Last day to <u>drop class</u> with a full refund and with no record of grade is **Sunday**, **October 9**th.
- The deadline for dropping with a "W" is Friday, November 18th. In every case, a student is responsible for dropping him/herself. You should not assume that you are automatically dropped from the class for non-attendance. Students on the final grade roster who have not dropped, and who do not show up for the final exam, automatically receive an F in the course.
- <u>Last day to add</u> is Saturday, October 8th.
- Zero Tolerance policy towards Cheating

Cheating on any exam/quiz/ HW assignment/tutorial may result in an F grade for the course and is absolutely prohibited in my class! Looking at someone else's exam, helping another student during an exam, talking to anyone except me during an exam, or using an external source of information for which you were not explicitly given permission, will result in an instructor drop or an F grade for the course. Cheating incidents will also be reported to the Dean of Students. I will be extremely strict about not allowing any sort of electronic devices including cell phones, laptops etc during exams, quizzes.

Also, please do not wear earphones/ hats/ sunglasses to quizzes and exams.

• <u>College Policy:</u> Students cannot take the same class more than three times for a grade, including W. Late adds and drops will not be processed.

Additional Assistance:

The key to being able to take advantage of any of these services is to be quick to recognize your need for assistance. It is always better to seek help sooner rather than later.

- 1) The Math, Science & Technology Resource Center (MSTRC): Free online assistance is available on zoom through the <u>Student success Center</u>, along with Academic skills Workshops. You may also use <u>Nettutor</u> on Canvas to access De Anza tutoring. WebAssign and Canvas have their own online help as well. CANVAS also has online help.
- 2) Your classmates: Use the "DISCUSSIONS" feature in Canvas. Many students find informal study partnerships and groups to be most helpful in learning math. I recommend that you study with others in this class and participate in canvas discussion boards.
- 3) SEE ME DURING OFFICE HOURS: Please feel free to ask me questions during class time or fix appointments outside class timings. I'll give you as much direction and assistance as I can, and refer you to additional resources as needed. **Do not wait until you are drowning to get help.**

- 4) Any student with a documentable disability who needs academic accommodations should contact:
 - a) Disability Support Services (DSS): Student Services Building (408) 864 8839
 - b) Educational Diagnostic Center (EDC): Learning Center West 110; (408) 864 8839
 - c) Special Education Division: 864 8407; WWW.deanza.edu/specialed

5) Cell phone, smart watch and other device policy

- Have to be stowed away and out of sight. Have to be completely silent, not even in vibrate mode. *No headphones allowed in class*. Noise/ light / text making devices should never be seen while class is in session. Please switch off your cell phones / beepers before entering the class out of courtesy to others.
- You will be given 2 warnings, after which I will take off 2 points every time.
- You may go outside the class anytime to use your cell phone
- During exams, if you have to go outside the classroom, hand in the cell phone to me first.
- If your phone sounds during a quiz or exam, this will be an indication that you are done with the quiz or exam and you risk having your paper taken from you.

6) Class room and email etiquette

- -Masks are mandatory inside classrooms.
- -If you are late to class, please settle down very quietly, without talking or disturbing anyone.
- -In your email correspondences, do not forget to sign off with your name and greetings at the beginning. Attach photo/ scan of any question you are asking.

Contract

One purpose of this course syllabus is to provide you with the guiding principles upon which the class runs, and another is to make sure that you have at your fingertips answers to any questions which might arise.

Please put this sheet in a safe place where you can easily refer to it.

Make sure you read the syllabus in its entirety before you ask me any questions about the course.

USEFUL TIPS:

- 1. Education is a gift, an opportunity, not a guarantee. When you feel like giving up, carefully organize your rationalizations and excuses on a piece of paper. When your list is complete, burn the paper! Then **keep working** on ...
- 2. Minimize your dependence on published answers at the back of the book/ internet. Learn to verify your answers by checking your solutions or by working the problem two different ways (perhaps numerically and algebraically). You will NOT have an answer key during examinations, nor at work, so <u>develop self-reliance</u>.
- **3.** Students often fall into the trap of thinking that if they have done all the homework by looking at the answers and working backwards, or by plugging in numbers in similar problems, that they have mastered the material. With luck, this level of effort alone might earn a 'C' grade. Serious students do enough additional homework problems to evoke a feeling of **smug confidence**.
- **4.** Be sure to quickly scan-read each section taught the previous day before coming to class. You can then spend far less time taking notes, concentrate more on what is said, and ask lots of questions.
- 5. Once class starts, all conversations among students must stop. Except when we are working in groups, only one person will speak, and everyone else will listen.
- **6.** You will never be penalized for being late. But please be respectful and mindful to your fellow classmates and teacher in case you do get late, and quietly take a seat without making conversation with anyone. There will be no retakes of pop quizzes if you miss them due to being late.



MATH 1A Fall 2022 Calendar

| | Monday | Tuesday | Wednesday | Thursday | ONLINE Friday | Week |
|-----------|----------------------|--------------------------------------|-----------|-----------------------------|--|----------------|
| September | 26 First Day Intro | 27 | 28 | 29 QUIZ 1 | | 1 |
| | 3 | 4 | 5 QUIZ 2 | 6 EXAM 1 | ook in | 2 |
| | 10 | 11 | 12 | 13 QUIZ 3 | CANV | 3 |
| | 17 SPECIAL QUIZ 1 | 18 EXAM 2 | 19 | 20 QUIZ 4 | Look in CANVAS for work to do on your own on | 4 |
| | 24 | 25 | 26 | 27 QUIZ 5 | work t | 5 |
| | 31 | 1 | 2 | 3 QUIZ 6 | o do oı | 6 |
| 21 28 | 7 SPECIAL QUIZ 2 | 8 EXAM 3 | 9 | 10 QUIZ 7 | n your | 7 |
| | 14 | 15 | 16 | 17 QUIZ 8 | own c | 8 |
| | 21 | 22 | 23 | Thank sgiving H Campus Slos | T Avebile | 9 |
| | 28 SPECIAL QUIZ 3 | 29 EXAM 4 | 30 | 1 QUIZ 9 | ed DAYS | 10 |
| | 5 | 6 | 7 | 8 SPECIAL QUIZ 4 | | 11 |
| | 12 | 13 FINAL EXAM 9:15 to 11:15 AM | 14 | 15 | | FINALS WEEK |

Last day to drop without W: Sunday, Oct 9th; Last day to drop with W: Saturday, Nov 18th

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.

Office Hours:

In-Person MLC Student lounge (second floor) M,W 10:20 AM 11:20AM