MATH 1A: CALCULUS 1A-20Z (CRN- 13180)-
Summer 2021

Instructor: Neelam R. Shukla
Class Days & Time: MTWR 12:30-2:45 pm
Email: Shuklaneelam@fhda.edu
Office Hour: MW 6:00 – 7:00 pm

Course Description: Fundamentals of differential calculus. (5 units)
Required Text and Recommended Materials:

- Textbook: Calculus: Early Transcendentals with Hyperbolic Functions, 8th Edition, J. Stewart. You need not to but the textbook, e-book will be available with WebAssign code.

- Calculator: Although not necessary for most of this course, it can sometimes be helpful to have access to some type of graphing calculator. This can be a physical graphing calculator or free online graphing tool such as https://www.desmos.com/or https://www.wolframalpha.com/. You can use T1 84 calculator.

- Access to https://deanza.instructure.com/. Canvas is where all the course information will be available. Information regarding grades, lectures, resources, etc.

Goals for Students in the Course:

- To build a solid foundation for future calculus courses.

- To build confidence in their academic abilities in the math class and beyond.

- Be able to collaborate and discuss mathematics with classmates.

- To gain intuition behind concepts in the course.

Grading:

4 Exams	Homework	Quizzes	Discussions	Final
35 %	20 %	20 %	5%	20 %

Grading scale	
≥ 100% A+	75-79.9% C+
93-99.9% A	70-74.9% C
90-92.9% A-	68-69.9 % D+
86-89.9 % B+	63-67.9% D
83-85.9% B	60-62.9% D-
80-82.9% B-	≤ 59.9 F

Exams 35 %: There are 4 exams. These exams will be distributed via Canvas as a PDF or Quiz and students will upload their completed work to Canvas. (Insert pdf or .jpg pictures)

ONLINE Homework: 20%: On WebAssign

The purpose of homework is to help you learn the material in the course. You learn the most and do your best if you work through the homework problems. Also, in WebAssign, there is an "**Ask the Instructor**" button - please use this if you have questions. Your 8 highest **WebAssign** homework scores count towards your final grade; this also takes into account any technical difficulties you may have. NO EXTENSIONS WILL BE GRANTED. **Each homework question may be submitted up to 5 times**. Homework is usually due on **WEDNESDAY** night at 11:59pm. To access the homework, **click on the links in Canvas**!

Some questions will require you to input symbols. For this you will use the CalcPad which shows up automatically.

Quizzes: 20%: There will be 4 Quizzes

Discussions 5%: Each week there will be a discussion board in which you can interact with your classmates about the course content. Here is where we will try to build a sense of community and interact with others over the material and serve as a place for participation and collaboration.

Final 20 %: The final will be comprehensive.

Late Work: No late work will be accepted. Due dates will be clearly given on the assignments in Canvas. There will also not be any make up work. To compensate for illnesses or emergencies, one least score of the exam, Quiz & homework category will be dropped.

Attendance: This class will be synchronously held via Zoom so attending means being present for the courses allotted time during the zoom sessions. As is the case with any class, being present is crucial and necessary for doing well in the course. Note that a student may be dropped from the course if participation is low. Specific reasons leading to dropping a student are given below.

You may be dropped from the course if:

- You miss 2 homework sets and or quizzes in a row.

- You do not interact with Canvas for a week.

- You miss 2 full weeks of synchronous meetings without contacting me prior to missing those meetings.

Note that if for any reason you feel like you may need to drop the course, it is your responsibility to do so.

Academic Integrity: If it is suspected that academic dishonesty is taking place on an assignment, the college will be notified and will result in a failing grade on the assignment or a failing grade in the class. For further information on academic integrity please see https://www.deanza.edu/policies/academic_integrity.html.

Help and Support:

- The Math, Science and Technology Resource Center (MSTRC): Here you can access free online tutoring via Zoom. See, https://www.deanza.edu/studentsuccess/for further details. Net tutor, which can

be accessed via Canvas, is another place you can find free online tutoring.

- I encourage students to make use of office hours! This is another great place to get help on material related to the course.

- The discussion boards will be a great place to collaborate with classmates regarding the course content.

Disability Statement: If you have a disability related need for academic accommodations or services in this course, you will need to provide me with a Test Accommodation Verification Form (TAV form) from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give a two week notice if they are in need of accommodations. For those students with disabilities, you can obtain a TAV form from their DSS counselor (408 864-8753 DSS main number) or EDC advisor (408 864-8839 EDC main number). The application process can be found here: https://www.deanza.edu/dsps/dss/applynow.html

Important Dates:

Summer session starts from June 28

July 5, No Class Independence Day

For a more comprehensive list of important dates see http://www.deanza.edu/calendar/.

Tentative Course Schedule:

Week	Section
Week1, June28,29	Some review Ch.1 Tangent Lines 2.1, Limits 2.2
June 30, July 1	Limit laws 2.3, Def of Limit 2.4 Continuity 2.5, Derivatives 2.7, 2.8
Week 2 July 5(No Class),6	**Exam 1** Polynomial and exponential derivatives 3.1 Product and quotient rules 3.2
July 7,8	Trig derivatives 3.3 Linear approximation and differentials 3.10 Newton's Method 4.8
Week 3 July 12, 13	Chain rule 3.4 Implicit differentiation 3.5
July 14, 15	**Exam 2** Logarithmic differentiation 3.6 Related rates 3.9
Week 4 July 19, 20	Hyperbolic functions 3.11 Parametric equations 10.1, 10.2

July 21, 22	Infinite limits and horizontal asymptotes 2.6 L'Hôspital's Rule 4.4
Week 5 July 26,27	**Exam 3** Maxima and minima 4.1 Mean Value Theorem 4.2
July 28, 29	Curve sketching 4.3 - 4.5
Week 6 Aug 2, 3	**Exam 4** Optimization 4.7 Antiderivatives 4.9
Aug 4, 5	Final Exam Thursday from 12:45 PM to 2:45 PM.

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.