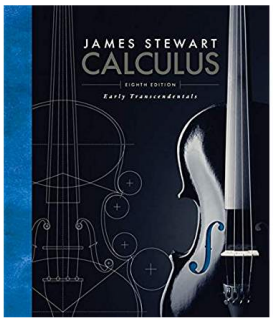
Math 1A: Differential Calculus
Spring 2020, CRN 01190, Section 63, 5 Units
Tuesday and Thursday 6:30 PM to 8:45 PM

Instructor Information

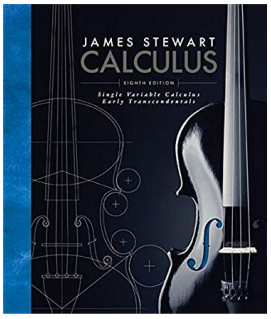
Instructor:	Andrew Jianyu YU
Email:	yujian@fhda.edu
Office Location:	E37 (E Quad, Room 37)
Office Hours:	Tuesday and Thursday 5:30 PM to 6:30 PM Via Chat or Zoom on Canvas

Course Description
Fundamentals of differential calculus

Prerequisite
MATH 43 or MATH 43H (with a grade of C or better), or appropriate score on Calculus Placement Test within the past calendar year.

Required Textbook (One Book Only)


Calculus: Early Transcendental, by James Stewart, 8th Edition; Book Length 1368 pages; ISBN-10: 9781285741550, ISBN-13: 978-1285741550, ASIN 1285741552; Publisher: Cengage Learning; Publication date: February 4th, 2015
This textbook is a full version, which contains chapter 1 to chapter 17. It is sufficient for the entire calculus sequence. Math 1A covers chapters 1, 2, 3, and 4. Math 1B covers chapters 5, 6, 7, 8, and 9. Math 1C covers chapter 11, 12, and 13. Math 1D covers chapter 14, 15, and 16.



Single Variable Calculus: Early Transcendental, by James Stewart, 8th Edition; Book Length 960 pages; ISBN-10: 9781305270336, ISBN-13: 978-1305270336; Publisher: Cengage Learning; Publication date: January 1st, 2015
This textbook contains chapters 1 to 11 of the full Calculus version, which is only sufficient for Math 1A and 1B.

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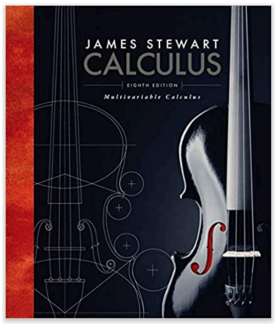
Multivariable Calculus: Early Transcendental, by James Stewart, 8th Edition; Book Length 624 pages; ISBN-10: 9781305266643, ISBN-13: 978-1305266643; Publisher: Cengage Learning; Publication date: June 15th, 2015

This textbook contains chapters 12 to 17 of the full Calculus version, which is only sufficient for Math 1C and 1D.



Calculator

TI-83 Plus TI-84 Plus TI-84 Plus CE TI-Nspire

Graphing calculator is **optional but recommended** for the course and the entire Calculus sequence. You may rent a TI-83 Plus in the bookstore for about $20 per semester/quarter. You are required to bring a physical calculator to the exam, and sharing calculator is considered as cheating incident. Using the calculator apps on your phone is strictly prohibited on the exam. Do not purchase the TI-Nspire Graphing Calculator (around $150) because it is too advanced for this course. Instructions will not be provided for TI-Nspire.

Technical Requirements

- **Your Email:** Please check your email regularly. If possible, connect your email with an app in your smartphone. You are welcome to ask me any questions related to lecture, homework, or personal emergency through email.
  Subject of my emails "Math 1A: _____"
- **Canvas (Main System):** Lecture notes, announcements, and grades can be found on Canvas. This is the main learning management system in this course. You are expected to check Canvas in a regular basis to keep up with the course.
- **WebAssign (Work System):** Homework, quizzes, and exams will be assigned and graded on WebAssign. If an assignment is required to be completed on paper, you are required to scan your work and upload it to Canvas. WebAssign account is not free, but there is a free trial period. Please use the register to the course using the free trial period and pay the full price before the deadline.

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WebAssign Class Key and Self-Enrollment

Go to www.webassign.net to register for your account. Please take the advantage of the free trial and do not pay anything yet. All the purchases are non-refundable.

Class Key: deanza 2931 7912

All the homework, quizzes, and exams will be held on WebAssign. If you are still on your free trial, pay the full price before the deadline. Otherwise, you will be removed from the system.

Scanning Your Paperwork

If an assignment is expected to finish on paper, you have to download the assignment from Canvas, print the assignment, and completed the assignment. If you do not have a scanner at home, use a free app called Genius Scan. It allows you to take pictures of your work and merge multiple pictures into one PDF document. *Submitting multiple pictures is not allowed. Points will be deducted if you do so.*

Lectures and Expected Preparation

All the lectures will be recorded in advanced and posted on my Youtube channel called “Lemon Math”. All the lecture videos will be stored in a playlist called “Differential Calculus”. If you wish, click “subscribe” to see the latest update of the videos. If you have any questions regarding the lecture, send me an email and I will response to your email as soon as possible.

Attendance

The course is in a virtual mode. You are expected to maintain a good self-discipline to finish the assignments on time because late works will receive no credits.

Homework, 15% of the Course Grade

Problems will be assigned from each section taught in lecture. You are required to finish most of the homework on WebAssign. If the homework is required to be written on paper, you have to scan your work, merge all the images into one PDF document with multiple pages, and submit to Canvas. The lowest homework score will be dropped at the end of the quarter.

Quiz, 20% of the Course Grade

A quiz will be assigned at the due date of every homework. You are expected to solve 2 to 3 problems on a quiz. Quiz will be held on WebAssign. All the quizzes are open-book and open-notes. This is an individual assignment. You are required to do your own work. Group-work is strictly prohibited. The lowest homework score will be dropped at the end of the quarter.

Midterm, 40% of the Course Grade (Two Exams in this Course)

All the midterms will be held on WebAssign. Midterm date will be announced in advanced. All the midterms are open-book and open-notes. This is an individual assignment. You are required to do your own work. Group-work is strictly prohibited. Dropping the lowest scare is not applicable on exams.

Final Exam, 25% of the Course Grade

The final exam will be held on Canvas. Although this is also an open-book and open-notes exam, you must do your own work. Group-work is strictly prohibited.

Grading Rubrics

Your course grade will be assigned in the following standard:

A: 100% to 92%	A-: 91% to 90%	
B+: 89% to 86%	B: 85% to 82%	B-: 81% to 80%
C+: 79% to 74%	C: 73% to 70%	
D: 69% to 60%	F: below 60%	

Extra Credit Assignment

There are no extra credit assignments in this course to improve your grade. Please do not ask for any.

Academic Integrity

Academic dishonesty will not be tolerated. Any student attempting to defraud the instructor on a quiz, exam, final exam, or any other assessment item designated as an individual assignment will receive a zero on that assignment. This score is irreplaceable. If a cheating incident is detected on your work, the rest of your works in the course will be closely monitored and examined. All the assistant seekers and assistant providers will be reported to the college.

Available Support Services

The Math Tutorial Center in S43 has free tutoring for this course. Due to the virtual mode, you have to visit their website to schedule for tutoring.

Course Content

The following topics will be covered in this course:

- Limits and Derivatives
- Differentiation Rules
- Applications of Differentiation
- Antiderivatives

Important Dates to Remember

April 13	First day of fall quarter
April 25	Last day to add classes
April 26	Last day to drop classes for full refund or credit Last day to drop classes without a W It is student's responsibility to complete this process.
May 8	Last day to request "Pass/No Pass" for 12-week classes
May 23 to 25	Memorial Day Weekend – Campus Closed
June 5	Last day to drop classes with "W" It is student's responsibility to complete the withdrawal process. Instructors are forced to give a letter grade after this date. No exceptions.
June 22 to 26	Final Exam's Week

College Policy: If the student chooses not to complete the class, it is the STUDENT'S RESPONSIBILITY to drop or withdraw by the college deadlines. If you stop attending but do not withdraw or drop you may fail with a grade of F.

The professor reserves the right to make changes to the syllabus, including project due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.

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.