Math 1D: Calculus
Winter 2023, CRN 30331, Section 07Y
Monday to Thursday 10:30 AM – 11:20 AM
Friday: Asynchronous meeting online, lecture videos will be posted on Canvas
Classroom: MLC 260

Instructor Information

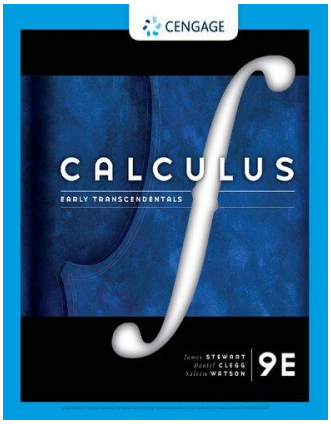
Instructor:	Andrew Jianyu Yu
Email:	yujian@fhda.edu
Office Location:	E37 (E Quad, Room 37)
Office Hours:	Monday to Thursday: 11:20 to Noon Please see me right after class so we do not need to walk back to E37.

Course Description

Topics in this course include partial derivatives, multiple integrals, vector calculus, and their applications.

Prerequisite

MATH 1C or MATH 1CH (with a grade of C or better) or equivalent.
Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273



Required Textbook

Calculus: Early Transcendental 9th Edition by James Stewart.
Publisher: Cengage Learning; 9th edition (January 9, 2020); Language: English; Hardcover: 1376 pages;
ISBN-10: 1337613924; ISBN-13: 978-1337613927
Item Weight: 5.45 pounds
Dimensions: 8.6 x 1.9 x 10.1 inches
Important Notes: It is not necessary to purchase a hard copy of this book because you will not be asked to solve textbook problems on paper. The 8th edition is uploaded to "Files" on Canvas.

Graphing Calculator

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

Graphing calculator is strongly **recommended** for the course. TI-84 Plus or Plus CE is highly recommended. This calculator is widely used in math, science, and engineering courses. 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. **Please following the format of the subject line stated below.**

  "Math 1D: _____"

  You write your inquiry after the colon. For example
  Math 1D: Request Extension for Homework 2
- **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 is **not free**. You must pay for your own account before the free trial period ends. Otherwise, you will not be able to complete any assignments until you make a payment. The **first module** on Canvas contains a link to register your WebAssign account and another link to access to WebAssign. Alternatively, you can login WebAssign on your web browser though the link https://www.webassign.net/.
- **Canvas (Main Learning Management System):** WebAssign has been integrated to Canvas. Each weekly **module** contains the lecture videos and the weekly assignment. The first module has 3 links – the first link for register your WebAssign account, the second link for accessing WebAssign from Canvas, and the third link for Cengage technical support. There are 2 ways to access an assignment. The first way is to

click on the assignment on Canvas, it will directs you to WebAssign. The second way is to login WebAssign using the link above. **Scores on WebAssign will automatically roll over to the grade book on Canvas. At least one homework and one quiz will be assigned weekly. It is strongly recommended that you check your WebAssign account frequently because late assignments will count as no credits.**

WebAssign Class Key and WebAssign-Canvas Integration

Use the link in the first module to register your account. Please take the advantage of the free trial and do not pay anything yet. **All purchases are non-refundable.** There is no class key for this course because WebAssign has been integrated to Canvas. **Make sure your name on WebAssign matches your official name on Canvas.** Note, if you have a name that you preferred to be called but this name is not in the school system, do not use it on WebAssign. **Please capitalize the first letter of your first and last name. For example, type "Andrew" instead of "andrew". Your instructor is not an employee of WebAssign. If you experience any technical difficulty on WebAssign, please contact them to speak to a customer representative.**

Canvas

There are a few places that you have to visit frequently on Canvas.

- **Modules**
  Each weekly module shows the notes and homework of that week.
- **Files**
  Notes, books, and syllabus
- **Discussion**
  If we want to have a discussion regarding any topics, we will do this in the Discussion tab.
- **Announcement**
  Emergencies, date change, change of plans, and etc

Attendance

Since this is an in-person course, attendance will be taken in every meeting. Students who missed 3 meetings will be dropped from the course.

Scanning Your Paperwork For Online Quizzes and Exams

Other than homework, you have to show your work for all online quiz and exam problems. Use one of the options below to upload your work to Canvas for credits. For either option below, number the problem and the page. For example, a grader can easily tell the problem number, the content of the problem, and all the steps you wrote to reach to the final answer. If an application problem has long problem statements, or a problem provides a very complicated graph (e.g. three-dimensional image), it is not necessary to copy the problem statements or the graph.

1. If you have a scanner, scan all the pages, save them as **one PDF document**, and upload the file to Canvas.
2. If you do not have a scanner, download the free app called **Genius Scan – PDF Scanner App** (five starts over 938k reviews). Take a picture of each page, use the app to merge all the pictures into **one PDF documents,** and upload the file to Canvas.

NOTE: Points will be deducted if you upload multiple images.

Homework & Discussion, 10% 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. For written assignments, you have to scan your work, merge all the images into one PDF document, and submit to Canvas.

For in-class discussion: students will be solving problems in groups, instructor will stop by each group to answer or ask questions. Points will be awarded based on the answers and participation.

For other discussion: topics will be posted on Canvas's "Discussion", follow the directions and write your response. These free-response discussions have no right or wrong answer. To receive full credits, you must reply to one other student's discussion.

Quiz & Pop Quizzes, 15% of the Course Grade

A quiz will be assigned and graded on WebAssign at the due date of every homework. All the quizzes are open-book and open-notes. Quiz is an individual assignment. You are required to do your own work. Group-work is strictly prohibited. **A random pop quiz may be given at the last 10 to 15 minutes of a lecture. Pop quiz is based on the materials covered within that lecture. You are allowed to use any notes to take the pop quiz. Be aware**

that pop quizzes are individual work. Since pop quizzes and time-sensitive, there is no make-up pop quizzes.

Every homework and quiz score counts. Lowest score will not be dropped. Every student has one chance to receive one extension on homework and one extension on quizzes without penalties. This extension does not apply to midterms, final exam, and the last homework/quiz. More importantly, your one-time extension must be redeemed within 7 days after the due date. For example, if homework 1 is due on October 1st at 11:59pm, the deadline to request an extension is October 8th at 11:59pm.

The incident of falsifies information for financial aid is increasing in every school district. If you do not complete the first week's assignment or having no activities on Canvas, you will be dropped from the course.

Midterm, 40% of the Course Grade (4th and 8th week)
The exam will be assigned and graded on Canvas. Every student is required to take the exam in class. Please bring your fully charged tablet or laptop to class. You are allowed to bring 3 sheets (6 pages total, front of back) of notes. The notes can be typed or handwritten. Sharing calculator, tablet, or laptop is strictly prohibited and considered as cheating. All the exams are individual work. Students who cheat, plagiarize or help someone else cheat will be given a zero on the exam and a failing grade in the course.

Final Exam, 35% of the Course Grade
Thursday, March 30th, from 9:15 AM to 11:15 AM
The final exam will be assigned and graded on Canvas. Every student is required to take the exam in class. Please bring your fully charged tablet or laptop to class. You are allowed to bring 6 sheets (12 pages total, front of back) of notes. The notes can be typed or handwritten. Sharing calculator, tablet, or laptop is strictly prohibited and considered as cheating. All the exams are individual work. Students who cheat, plagiarize or help someone else cheat will be given a zero on the exam and a failing grade in the course.

For Quizzes, Midterms, and Final
You must upload all your written steps to Canvas; otherwise, your score does not count toward your course grade.

Late Submission = Zero Credit; Every Score Counts

Late submissions are not acceptable, and there is no exception. Do not ask for any extensions. Every score counts, and your lower score in all types of assignments mentioned above will **not** be dropped.

Check Points:

- Homework & Discussion 10%, Quiz & Pop Quiz 15%, Midterm 40%, Final 35%; Zero credit to all the late and missing work, no exception.
- For quizzes, midterms, and final, you must show all your work on paper and submit your work to Canvas. The score does not count toward your course grade if your work is missing.
- You are expected to check the due dates on your WebAssign account at least once a day to plan accordingly. Also, you are expected to check our Canvas page to see announcements and week module regularly.
- Comparing to homework, you will have at most 3 attempts on quizzes and exams. Please solve the problems on a separate sheet of paper and double-check your work before submitting your answer to WebAssign. Additional attempts will not be granted for any reasons.

Tutoring at the Student Success Center (SSC)

The Student Success Center (SSC) has moved services into virtual rooms via Zoom for all forms of tutoring and workshops. You can also get free math tutoring services in-person.
Please visit the following website for details and schedules.
https://www.deanza.edu/studentsuccess/mstrc/

Grading Rubrics

Your course grade will be assigned in the following standard:

A: 100% to 94%	A-: 93% to 90%	
B+: 89% to 86%	B: 85% to 83%	B-: 82% to 80%
C+: 79% to 75%	C: 74% to 70%	
D: 69% to 60%	F: below 60%	

All the cut-offs are not negotiable. For examples, 89% is not an A-minus and 69% is not a C. Transferring to UCs, CSUs, top-ranking universities, or scholarships are not a reason to ask for a higher grade.

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. *For example, bringing a quiz or an exam problem to a tutor is considered as cheating. Posting a quiz or an exam problem to websites such as Chegg, Course hero, or a forum is considered as cheating.*

Course Content

Chapter 14: Partial Derivatives
14.1: Functions of Several Veriables
14.2: Limits and Continuity
14.3: Partial Derivatives
14.4: Tangent Planes and Linear Approximations
14.5: The Chain Rule
14.6: Directional Derivatives and the Gradient Vector
14.7: Maximum and Minimum Values
14.8: Lagrange Multipliers

Chapter 15: Multiple Integrals
15.1: Double Integrals over Rectangles
15.2: Double Integrals over General Regions
15.3: Double Integrals in Polar Coordinates
15.4: Applications of Double Integrals
15.5: Surface Area
15.6: Triple Integrals
15.7: Triple Integrals in Cylindrical Coordinates
15.8: Triple Integrals in Spherical Coordinates
15.9: Change of Variables in Multiple Integrals

Chapter 16: Vector Calculus
16.1: Vector Fields
16.2: Line Integrals
16.3: The Fundamental Theorem of Line Integrals
16.4: Green's Theorem
16.5: Curl and Divergence
16.6: Parametric Surfaces and Their Areas
16.7: Surface Integrals
16.8: Stokes' Theorem
16.9: The Divergence Theorem

Academic Calendar:
January 9: First day of winter quarter
January 16 (Monday): Martin Luther King Jr. Holiday – no classes
January 21: Last day to add classes
January 22: Last day to drop classes without a W
February 17-20: President's Holiday – no classes
This affects our Friday and Monday.
March 3: Last day to drop classes with "W"; please read the important notes below regarding the withdrawal policy. To withdraw from this class, go to portal where you register this class, change the status from "registered" with "withdraw". After you are done, please double-check your status.
Important Note: It is student's responsibility to drop or withdraw the class if that student decides not to finish the class. After the last day to withdraw is passed, student cannot withdraw from the class.
March 27 to 31: Final exams
For Instructors Only:
January 23rd (Monday): Census Day
Grades must be submitted by Wednesday, April 5th, by midnight

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):

*Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
*Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
*Synthesize the key concepts of differential, integral and multivariate calculus.

Office Hours:

M,T,W,TH	11:20 AM	12:00 PM	In-Person,By Appointment	E37
T,TH	06:00 PM	06:30 PM	In-Person	E37