Math 1B: Calculus II
Fall 2025, CRN 27499, Section 19Z
Monday and Wednesday 6:30 pm to 8:45pm
This is an online synchronous course.

Instructor Information

Instructor:	Andrew Jianyu Yu
Email:	yuandrew@fhda.edu
Office Location:	E37
Office Hours:	Tuesday and Thursday 1:15 pm to 2:45pm in G7 Email me for additional hours.

Course Description

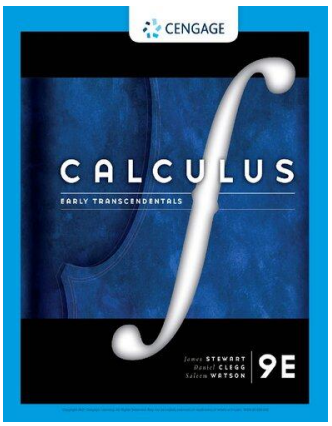
This course examines the fundamentals of integral calculus.

Student Learning Outcomes (SLOs)

1. Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
2. Formulate and use the Fundamental Theorem of Calculus
3. Apply the definite integral in solving problems in analytical geometry and the sciences.

Prerequisite

MATH 1A or MATH 1AH (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 1B 630pm: _____"

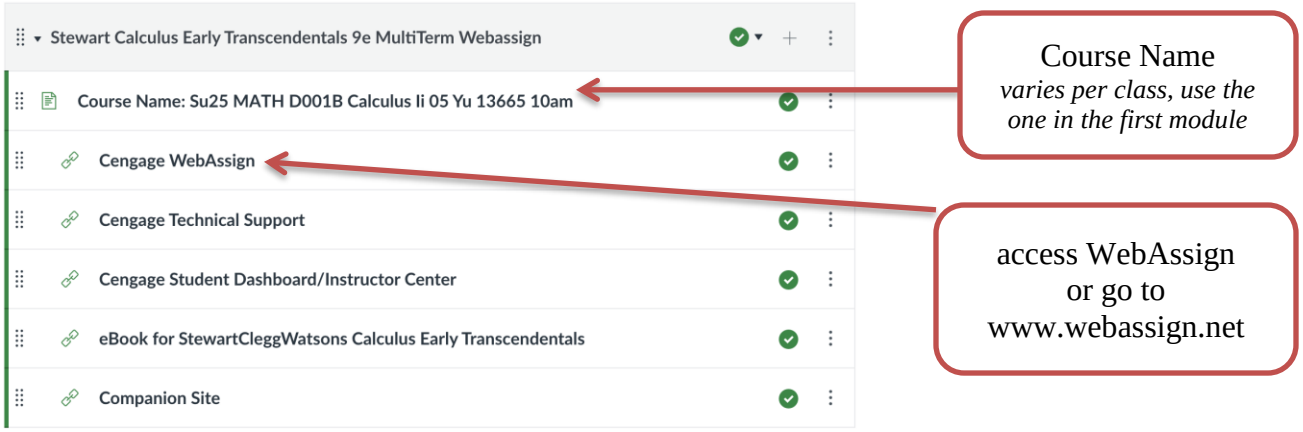
  You write your inquiry after the colon. For example
  Math 1B 630pm: Request Extension for Homework 2
- **WebAssign (Work System):** Homework, quizzes, and exams will be assigned and graded on WebAssign. If an assignment is required to be completed on paper, you are required to scan your work and upload 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 synchronize to the grade book on Canvas.**

You are expected to see at least one homework and one quiz every week.

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. Your instructor is not an employee of WebAssign and Cengage. 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.
- **Grades**
  Scores will be transferred from WebAssign to Canvas. Instructor will update the grade book weekly.
- **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

Mandatory Attendance

This is an online synchronous, Zoom will record the attendance in every meeting. Students who missed 3 or more meetings will be dropped from the course *without notice*.

Scanning Your Paperwork for Online Exams

Other than homework, you have to show your work for all online exams and for some online quizzes.. 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 1.2M 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 online lecture 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.

The due date of all the assignment follows the U.S. Pacific Standard Time (PST).

Quiz, 20% of the Course Grade

You are expected to complete online quizzes on WebAssign/Canvas. Quiz is an individual assignment. You are required to do your own work. Group-work is strictly prohibited. Some online quizzes require you to submit a proof of your work.

Midterm, 40% of the Course Grade (Two Midterms)

Midterm 1 is schedule in week 4 Wednesday October 15th
Midterm 2 is schedule in week 8 Wednesday November 12th
You have the entire class period to take complete the exam.

Final Exam, 30% of the Course Grade

Last day of class: August 7th during the regular class period
Week #12: Wednesday December 10th from 6:45 PM to 8:45 PM

You are required to take the exam during the time mentioned below. Exams cannot be extended and cannot be rescheduled. If you are unable to take the exam during these dates and times, please take a different class.

Exam policies for midterms and final exam:
(1) You are required to use your own device – either a desktop or a laptop that has a Webcam, a microphone, and can be connected to the Internet.
(2) Lockdown browser and Proctorial will be enforced.
(3) All exams are individual work. You are not allowed to seek for a human assistant or speak to anyone during the exam.
(4) You are allowed to use 5 sheets of notes for each exam. Notes can be either typed or handwritten on a 8.5 by 11 inches of paper. You are not required to submit your notes.
(5) You MUST show all your work on paper and submit the proof of your work for credits. Your score will not count if you failed to show a proof of your work. Please write legibly. Make sure your work is organized and can be followed.

As an online course, students are solely responsible for completing their exams without unauthorized aid. Even though exams are taken at home, you are strictly prohibited from conversing with or seeking help from any other person during the exam period. All examinations are to be approached with the same academic integrity as an in-person, proctored test.

Exam Proctoring Policy

To uphold the highest standards of academic integrity and to ensure that our online exams are equivalent to their in-person counterparts, all proctored exams (Midterm and Final) in this course are administered under the guidelines of a proctored environment. Students should be prepared to take these exams using **Proctorial** or similar proctoring solutions that may monitor your activity via webcam and microphone. This policy affirms that our assessments are secured and validates the credibility of your earned grade for any future academic audits or transfer requests.

Proctorial will monitor your activity during the exam through your webcam and microphone. You will be required to present your student ID, and the software may record your exam session. Any attempt to communicate with others, use unauthorized materials, or bypass the proctoring system is strictly prohibited and will be considered a violation of academic honesty policies. Please ensure you have a stable internet connection, a functioning webcam, and a quiet, private space for the duration of each exam.

Which online assignment requires you to submit a proof of your work?

Required to submit proofs	Not required to submit proofs
HW1 HW1**P** Quiz2 Quiz2**P** Midterm1 Midterm 1**P**aperwork FinalExam FinalExam**P**aperwork The "**P**" indicates that submitting a proof of your work associated with that assignment is required. *Tips: I showed all the work and formulas to every problem I solved in all of my assignments. When I study, I can easily recall my logics and my work written weeks ago.*	HW1 Quiz2 You do not see HW1P and Quiz2P. Meaning that it is not necessary to submit proofs of your work. *This is a math course. Many problems require you to perform computations in multiple steps. Showing work is an essential step to enhance your learning. Likewise, if I skipped many steps in my lecture, this creates confusions and you will not learn from my lecture notes.*

Last Submission Policies

- Every student can extend the due date of one homework.
- Every student can extend the due date of one quiz.
- Scores earned using additional attempts will be counted as zeros.
- The last homework and the last quiz cannot be extended.
- Your one-time extension must be redeemed within 5 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 4th at 11:59pm.
- All the written assignment cannot be extended.
- Midterm cannot be rescheduled or extended.
- Final exam cannot be rescheduled or extended.

Check Points:

- Homework & Discussion 10%, Quiz 20%, Midterm 40%, Final 30%; Zero credit to all the late and missing work, no exception.
- For all online exams and some online quizzes, 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 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) provides free math tutoring services in-person and online. Please visit the following website for details and schedules.
https://www.deanza.edu/studentsuccess/

Grading Rubrics

Your course grade will be assigned in the following standard:

A: 100% to 93%	A-: 92% 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, 89.8% is not an A-minus and 69.8% 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 5: Integrals
Section 5.1: Areas and Distances
Section 5.2: The Definite Integral
Section 5.3: The Fundamental Theorem of Calculus
Section 5.4: Indefinite Integrals and the Net Change Theorem
Section 5.5: The Substitution Rule

Chapter 6: Applications of Integration
Section 6.1: Areas Between Curves
Section 6.2: Volumes
Section 6.3: Volumes by Cylindrical Shells
Section 6.4: Work
Section 6.5: Average Value of a Function

Chapter 7: Techniques of Integration
Section 7.1: Integration by Parts
Section 7.2: Trigonometric Integrals
Section 7.3: Trigonometric Substitution
Section 7.4: Integration of Rational Functions by Partial Fractions
Section 7.5: Strategy for Integration
Section 7.6: Integration Using Tables and Computer Algebra Systems
Section 7.7: Approximate Integration
Section 7.8: Improper Integrals

Chapter 8: Further Applications of Integration
Section 8.1: Arc Length
Section 8.2: Area of a Surface of Revolution
Section 8.3: Applications to Physics and Engineering
Section 8.4: Applications to Economics and Biology
Section 8.5: Probability

Chapter 9: Differential Equations
Section 9.1: Modeling with Differential Equations
Section 9.2: Direct Fields and Euler's Method
Section 9.3: Separable Equations
Section 9.4: Models for Population Growth

Academic Calendar:

September 22: Fall classes begin

October 5: Last day to add 12-week classes

Last day to drop a class without a W

November 11 (Tuesday): Veterans Day holiday – no classes; offices closed

November 14: Last day to drop classes with a W

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.

November 27-30 (Thursday-Sunday) Thanksgiving holiday – no classes; office closed

December 8-12 (Week #12): Final exams

https://www.deanza.edu/calendar/final-exams.html

For the final exam schedule, Google "De Anza College Final Exam Schedule", input the date and time of this class to see the date and time

An academic quarter has 11 weeks of instruction and 1 week of final exam.

For Instructors Only:

Grades must be submitted by Wednesday, December 17th, 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):

• Analyze the definite integral from a graphical, numerical, analytical, and verbal approach, using correct notation and mathematical precision.
• Formulate and use the Fundamental Theorem of Calculus.
• Apply the definite integral in solving problems in analytical geometry and the sciences.

Office Hours:

T,TH	1:15 PM - 2:30 PM	G7