

Math 1B: Calculus Winter 2025

Instructor: John Jimenez **Class Information:** M-Th 08:30a -09:20p via **Zoom**

Passcode: 121314

Email: jimenezjohn@fhda.edu Office hours: M-Th 11:30a-12:30p in S55

Required Text and Recommended Materials:

• Textbook: Our free textbook will be Calculus Vol 2 from Openstax: https://openstax.org/details/books/calculus-volume-2. Note that this book is available free in the online and PDF format. If you prefer a physical copy, that would be paid out of pocket and is available directly from the website or you can use the PDF file to print at a local printing facility (staples, office dept, a local printing shop).

- Calculator: Although not necessary for most of this course, it can sometimes
 be helpful to have access to some type of basic calculator. This can be a
 physical graphing calculator or a free online graphing tool such as
 https://www.wolframalpha.com/. Note that
 graphing calculators are NOT allowed on exams. TI30's or equivalent can be
 used on exams.
- Technology: You will need access to some kind of laptop, desktop, or smart device that will allow you to complete assignments online. If you do not have such a device, you can check one out in the library for the quarter or possibly get a refurbished one for free from the CompTechS office. Reach out to me if this is the case.
- 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 math 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:

Exams	Homework	Final
60 %	20 %	20 %

Grading scale	
90-99.9% A	70-77.9% C
88-89.9 % B+	68-69.9 % D+
80-87.9% B	60-67.9% D
78-79.9% C+	≤ 59.9 F

All assignments will be online through MyOpenMath which is a free online course management and assessment system for mathematics. You will automatically be enrolled and have access to MyOpenMath through Canvas so no action is required by students.

Exams 60 %: Three exams will be given throughout the quarter. See the schedule at the end of the syllabus for the dates of the exams. The lowest exam score will be dropped.

Homework 20 %: Homework will be assigned at the beginning of each lecture week and will be due one week after it is assigned. The two lowest homework grades will be dropped.

Final 20 %: The final for this course will be a two-hour cumulative exam on Monday March 24th.

Assignment submission recommendation: All assignments will have due dates. If for some reason you cannot turn in an assignment, you can redeem a LatePass and turn it in as soon as possible without penalties. LatePasses are automatically activated if you choose to use one so you do not need to reach out to me for permission. You get 7 late passes for the quarter and each one extends the due date of one assignment by 48 hours per late pass. Note that you can use more than one late pass on an assignment. LatePasses cannot be used for exams. There are no makeups or LatePasses for exams or the final.

Resources to Succeed in this Course:

- The MESA center located in S54 has drop-in tutoring that you should definitely make use of. https://www.deanza.edu/mesa/
- Another great place to find tutors is in Math, Science & Technology Resource Center located in S43. https://deanza.edu/studentsuccess/mstrc/
- After-hours or weekend tutoring. See the <u>Online Tutoring</u> page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).
- I also encourage students to visit office hours and ask any questions about the course material or anything related. Office hours information is on the first page of this syllabus.
- It is known that students who participate in tutoring, group study, or workshops for three or more hours a week succeed at much higher rates than those who do not. The students who most need the help may be reluctant, but if you take the first step in seeking resources you will be glad you did.

To protect students GPA, you may be dropped from the course if:

- You miss the first day of class.
- You do not complete the first week's assignments.
- You have multiple missing assignments.
- You do not interact with Canvas regularly to keep up with the course.
- You miss up to a week of class.

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

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

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.

Tentative Course Schedule:

Week	Section
1	Areas and Distances 1.1
	The Definite Integral 1.2
	The Fundamental Theorem of Calculus 1.3
2	Indefinite Integrals 1.4
	The Substitution Rule 1.5
	Areas Between Curves 2.1
3	Volumes Disk/Washer Method 2.2
	Volumes by Cylindrical Shells 2.3
	Exam 1: Jan 27th
4	Integration by Parts 3.1
	Important Trigonometric Integrals 3.2
	Work 2.5
5	Trigonometric Substitutions 3.3
6	Approximate Integrals 3.6
	Improper Integrals 3.7
	Arc Length 2.4
	Area of a Surface of Revolution 2.4
	Center of Mass 2.6
7	
	Exam 2: Feb 24th
8	Probability Page 407
	Integration of Rational Functions by Partial Fractions 3.4
9	Differential Equations 4.1
	Separable Equations 4.3
	Logistic Growth Function 4.4
10	Direction Fields and Euler's Method 4.2
11	Exam 3: March 17th
	Linear Equations 4.5
	Review
12	Finals Week: Final is on Monday March 24th.

Important Dates:

For a comprehensive list of important dates like the drop deadline (February 28 Last day to drop classes with a W) see http://www.deanza.edu/calendar/.

Course Description: Fundamentals of integral calculus. (5 units)

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:

M,T,W,TH 11:30 AM 12:30 PM In-Person S55