Math 1B: Calculus (Asynch)
Summer 2024

Instructor: John Jimenez
Email: jimenezjohn@fhda.edu

Required Text and Recommended Materials:

- Textbook: Our (free) textbook will be Calculus Vol 1 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 depot, 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.desmos.com/ or https://www.wolframalpha.com/. Note that graphing calculators are not allowed on exams. TI30's or equivalent can be used on exams.

- 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:

Midterm Exams	Homework	Final
50 %	35 %	15 %

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 except for exams 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 50 %: Two exams will be given throughout the quarter (not including the final). See the schedule at the end of the syllabus for the dates of the exams. The lowest exam score will be dropped.

Homework 35 %: There will be weekly homework assigned on canvas though MyOpenMath..

Final 15 %: The final for this course will be on 8/9/24, the last day of class.

Figure 1: Grade categories for the course as a percentage of total grade.

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 can not be used for exams.

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

- You have multiple missing assignments.
- You do not interact with Canvas regularly to keep up with the course.
- Failure to communicate why you miss a class meeting or miss an assignment deadline.

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 July 1st	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 Volumes Disk/Washer Method 2.2 Volumes by Cylindrical Shells 2.3 **Exam 1 Due Sunday 07/14**
3	Integration by Parts 3.1 Important Trigonometric Integrals 3.2 Work 2.5 Trigonometric Substitutions 3.3
4	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 **Exam 2 Due Sunday 7/28**
5	Probability Page 407 Integration of Rational Functions by Partial Fractions 3.4 Differential Equations 4.1 Separable Equations 4.3
6	Logistic Growth Function 4.4 Direction Fields and Euler's Method 4.2 Linear Equations 4.5
8/9	**Final Exam Friday 8/9**

For a list of important dates 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: