MATH D001B 23

Calculus Winter 2023

Instructor: Fatemeh Yarahmadi

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Class Location and Time: Tuesday and Thursday 01:30 PM-03:45 PM Class: G5 on Campus

Questions outside of office hours? I will respond to your message or email within 24 hours, M-F. If you do not get a response after 24 hours, please resend.

Textbook & Required Materials:

Text: Calculus-Early Transcendental, 9th edition, by James Stewart

Graphing Calculator: TI-83/TI-83+/TI-84/TI-84+

Computer/smartphone to complete online homework assignments, submit activities on Canvas, and attend required live class meetings.

You should keep a **notebook** where you take notes and work the problems for reference.

Prerequisite: Math 1A, or equivalent course with a grade "C" or better.

Notebook

I recommend that you work out each homework problem on paper in a notebook. Even though you won't be handing in problems (unless announced), I expect that you write out the solution to each problem in your notebook. I believe the best way to prepare for a test is to practice the skills that you will demonstrate during the test. Practice solving each problem in a clear, logical, and methodical way and you will earn more points on your test. This will also help me whenever you come to me with questions, because it allows me to see your work and offer helpful suggestions suited to your questions.

Homework: Written sets for submission: During the term, I will send out homework sets to be discussed on Piazza and written up and submitted on Canvas. Homework is essential in any math class. You cannot expect to pass the class without putting consistent effort into homework. Show all work and explain any reasoning.

HW Guidelines:

The process of solving homework problems reflected in step-by-step solutions. The following are some specific criteria:

Guidelines for homework:

- Your name, class, and section number should be written at the top of the first page.
- Work must be NEAT and ORGANIZED. Write the questions (problems) IN ORDER.
- It is important for you to SHOW YOUR WORK! You are graded on the work you show to get the final answer, not just the final answer. Be sure to show your "scratch work" that goes with the problem.
- Do your work underneath the assigned problem then circle your final answer.
- At the end of each homework assignment, write a brief "Chat" paragraph

  - A key component in learning is thinking about how and what you are learning. What are

you doing that is working? What areas could you improve upon? What comes easily for you? Is there a pattern in your homework? At the end of each homework assignment, write a very brief paragraph about what you learned, what you feel you need to review, and any thoughts or feelings you have about the math you're doing. This is also a great opportunity for you to communicate with your instructor! There are no "right" answers. Be honest and use this as a learning process.

- Submit pdf file of your homework on Canvas

Group Quizzes: There are group quizzes in our class. Quizzes will focus on the material covered during that week.

Discussions: There will be discussion topics posted throughout the term. The deadline for responding to the topic will be indicated when the assignment is posted. You may not respond to the discussion once the deadline has passed.

Projects: Projects will be assigned throughout the term. Project due dates are indicated on the calendar and Canvas. You may not submit the assignment once the deadline has passed.

Exam Reviews: There will be an exam review assigned before each exam worth 10 points each. The purpose of the review is to aid the student in studying for the exams. You may not submit the assignment once the deadline has passed.

Midterm Exams: There will be three midterm exams. Each exam includes handwritten portion which you will upload to Canvas. Each midterm exam will focus the material covered since the previous exam. More details on exam dates and procedures can be found in Canvas.

Final Exam: The final exam will be posted on Canvas and will cover all material from throughout the term. More details on the final exam will be available on Canvas.

Grading Policy:

Homework	100 pts (12.5%)
Discussion	100 pts (12.5%)
Projects	100 pts (12.5%)
Midterm Reviews/ Midterms	300 pts (37.5%)
Final	200 pts (25%)
Total	800 pts

A	100%	to 94.5%
A-	< 94.5%	to 89.5%
B+	< 89.5%	to 86.5%
B	< 86.5%	to 83.5%
B-	< 83.5%	to 79.5%
C+	< 79.5%	to 74.5%
C	< 74.5%	to 69.5%
D+	< 69.5%	to 66.5%
D	< 66.5%	to 63.5%
D-	< 63.5%	to 59.5%
F	< 59.5%	to 0%

De Anza Final exams schedule: https://www.deanza.edu/calendar/final-exams.html

For detailed information on Homework, Quizzes, Projects, Discussion please log into your Canvas course page.

Important Dates and Deadlines: http://www.deanza.edu/calendar/dates-and-deadlines.html

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Academic Integrity:
All students are expected to exercise high levels of academic integrity throughout the quarter. You are encouraged to work together but you are expected to write up your answers independently. Any instances of cheating or plagiarism will result in disciplinary action, including getting a '0' on the assignment and report to the PSME dean, which may lead to dismissal from the class or the college

Student Honesty Policy:
"Students are expected to exercise academic honesty and integrity. Violations such as cheating and plagiarism will result in disciplinary action which may include recommendation for dismissal."

Disabled Services:
Students who have been found to be eligible for accommodations by Disability Support Services (DSS), please follow up to ensure that your accommodations have been authorized for the current quarter. If you are not registered with DSS and need accommodations, please go to http://www.deanza.edu/dss.

This syllabus is subject to change at the instructor's discretion. Changes will be announced in class and on Canvas.

Recipe for Success:

- If you ever have any questions, Email me! You are welcome to send email to me whenever you need help!
- Visit the Online Tutoring Center.
- Form an online study group.
- Watch all lectures, participate in every discussion, and complete every homework assignment.
- Read the sections to be discussed in class prior to the lecture

Chapter	SEC	Topics
Integrals	5.1	Areas and Distances
	5.2	The Definite Integral
	5.3	The Fundamental Theorem of Calculus
	5.4	Indefinite Integrals and the Net Change Thm
	5.5	The Substitution Rule
Appendix G Applications of Integrals	6.1	Areas Between Curves
	6.2	Volumes
	6.3	Volume by Cylindrical Shells
	6.4	Work
	6.5	Average Value of a Function
Techniques of Integration	7.1	Integration by Parts
	7.2	Trigonometric Integrals
	7.3	Trigonometric Substitution
	7.4	Integration of Rat'l Funct'ns by Partial Fractions
	7.5	Strategy for Integration
	7.7	Approximate Integration
	7.8	Improper Integrals
Further Applications	8.1	Are Length
	10.2	Parametric arclength
	8.2	Area of a Surface of Revolution
	8.3	Applications to Physics and Engineering
	8.5	Probability
Differential Equations	9.1	Modeling with Differential Equations
	9.2	Direction Fields and Euler's Method
	9.3	Separable Equations

Tentative Schedule

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	Friday
1	January 9	10 Ch 5	11	12 Ch 5	13
2	16 No Class	17 Ch 5	18	19 Ch 5	20
3	23	24 Ch 6	25	26 Ch 6	27
4	30	31 Ch 6	February 1	2 Exam 1	3
5	6	7 Ch 6	8	9 Ch 6	10
6	13	14 Ch 7	15	16 Ch 7	17
7	20 No Class	21 Ch 7	22	23 Exam 2	24
8	27	28 Ch 8	March 1	2 Ch 8	3
9	6	7 Ch 8	8	9 Ch 8	10
10	13	14 Ch 9	15	16 Exam 3	17
11	20 Final Review	21 Final Review	22 Final Review	23 Final Review	24

January 9 First day of winter quarter
January 16 Martin Luther King Jr. Holiday - no classes, offices closed
January 21 Last day to add classes
January 22 Last day to drop classes without a W
February 17-20 Presidents' Holiday - no classes, offices closed
March 3 Last day to drop classes with a W
March 27-31 **Thursday 1:30-3:30**

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	11:00 AM	01:00 PM	Zoom,Email,In-Person,By Appointment	S33N