MATH D001C61
Calculus Summer 2020

Instructor: Fatemeh Yarahmadi

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Class Location and Time: M,W 06:00 PM-08:15 PM Live lectures through Zoom (Link is posted on Canvas), T,R 06:00 PM-08:15 PM Group Activity and Participation through Canvas

Text: Calculus: Early Transcendentals, by James Stewart, 8th edition.

Class Website: Canvas which you can access through MyPortal to check grades, weekly announcements and assignments.

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

Participation in online class: Because this is an online class, there are no on-campus meetings to attend. However, this does not mean that you will be able to move through the class at your own speed. A major part of the class involves participation, discussing assignments and problems with your classmates.

Thus, everyone needs to be doing the same work at approximately the same time. You are expected to meet all deadlines for homework, quizzes, and discussions. We are learning a lot of different concepts that build on one another and it is very difficult to catch up if you fall behind.

Time management is critical in an online course. Attendance is required via actively participating online discussions through Canvas and Piazza.

Sources of Help:

1- Piazza (Online Question and Answer Platform) piazza.com (Code is posted on Canvas)

2- Nettutor: https://www.youtube.com/watch?time_continue=5&v=VlrPU34FzuY&feature=emb_logo

Homework:

Written sets for submission: During the term, I will send out homework sets to be written up and submitted on Canvas. These sets will include problem solving, critical thinking and applications exercises. Write your homework out in full detail, as modeled in the textbook and in class. There will be a strong emphasis on how the solutions are written up in this class. A subset of these exercises will be graded for correctness and all of it will be graded for completeness.

HW Guidelines:

- Write your full name in the top right hand corner of the first page.
- Upload them on Canvas

Discussions on Canvas and Piazza: There will be weekly discussion topics posted throughout the quarter on Canvas and Piazza. 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.

Quizzes: There will be regular online quizzes. The quizzes will be accessible via a link under the appropriate week. You will have a limited amount of time to complete the quizzes and deadlines will be announced in advance.

Projects: Two projects will be assigned throughout the quarter and each will be worth 25 points. Project due dates are indicated on the calendar and Canvas.

Exam Reviews: There will be an exam review assigned before each exam worth 20 points each. The purpose of the review is to aid the student in studying for the exams.

Exams: There will be **two midterms** and **one final** to test your understanding of the concepts from lecture and the homework. They should be straightforward for those who complete and understand the homework. Each exam will be worth 200 points.

Final Exam: A comprehensive final exam worth 200 points will be given on the last day of the class.
No make-up exams will be given. If you are forced to miss an exam, you need to contact me **before** the exam with a valid reason.

Grading Policy:

Homework	(25 @ 2 pts) = 50 pts	5.31%
Piazza	(25 @ 2 pts) = 50 pts	5.31%
Canvas Discussion	60 pts	6.38%
Quizzes	(4 @ 25 pts) = 100 pts	10.6%
Projects	(2 @ 25 pts) = 50 pts	5.31%
Midterm Review	(2 @ 20 pts) = 40 pts	4.25%
Midterms	(2 @ 200 pts) = 400 pts	42.55%
Final	200	21.27%
Total	940	

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.

Attendance:
Students may be dropped from the class if they **stop participating**. I may decide to drop you unless
you convince me of your motivation to stay, and your grades support this motivation.

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."

Disability Statement: De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Services (DSS) if you have any physical, psychological or other disabilities, vision, hearing impairments or ADD/ADHD. DSS is located in the student community services building, room 141. Phone number: 408-864-8753. "

Tentative Calendar

Contents

SEC	Content
10.1	Curves Defined by Parametric Equations
10.2	Calculus with Parametric Curves
10.3	Polar Coordinates
10.4	Areas and Lengths in Polar Coordinates
11.1	Sequences
11.2	Series
11.3	The Integral Test and Estimates of Sums
11.4	The Comparison Tests
11.5	Alternating Series
11.6	Absolute Convergence & the Ratio and Root Tests
11.7	Strategy for Testing Series
11.8	Power Series
11.9	Representations of Functions as Power Series
11.10	Taylor and MacLaurin Series
11.11	Applications of Taylor Polynomials
12.1	Three-Dimensional Coordinate Systems
12.2	Vectors
12.3	The Dot Product
12.4	The Cross Product
12.5	Equations of Lines and Planes
12.6	Cylinders and Quadric Surfaces
13.1	Vector Functions and Space Curves
13.2	Derivatives and Integrals of Vector Functions
13.3	Arc Length and Curvature
13.4	Motion in Space: Velocity and Acceleration

	Monday	Tuesday	Wednesday	Thursday
June July	29 10.1, 10.2	30	1 10.3, 10.4	2
July	6 11.1, 11.2, 11.3	7	8 11.4, 11.5, 11.6	9
July	11.7, 11.8, 11.9 13 Exam Review	14	15 Exam 1	16
July	20 11.10 11.11, 12.1	21	22 12.2, 12.3, 12.4	23
July	27 12.5, 12.6 Exam Review	28	29 Exam 2	30
Aug	3 13.1, 13.2, 13.3, 13.4	4 Final Review	5 Final Review	6 Final

Student Learning Outcome(s):

*Graphically, analytically, numerically and verbally analyze infinite sequences and series from the perspective of convergence, using correct notation and mathematical precision.
*Apply infinite sequences and series in approximating functions.
*Synthesize and apply vectors, polar coordinate system and parametric representations in solving problems in analytic geometry, including motion in space.