COURSE: Math 1A-02 Calculus   **QUARTER**:   Summer 2020
CRN: 12373   **INSTRUCTOR:**   Millia Ison
DAY: MTuWTh   ~~OFFICE PHONE:~~   ~~864-5659~~
TIME: online   ~~OFFICE NUMBER:~~   ~~S76E~~
OFFICE HOUR: By appointment   **E-mail**:   isonmillia@fhda.edu
COURSE PREREQUISITES: Math 43, or equivalent course with a grade "C" or better.
TEXT: Calculus: Early Transcendentals, by James Stewart, 8th edition.
ENROLL WEB ASSIGN : Class code: <mark>deanza 9522 1329</mark>
EQUIPMENT: A graphic calculator or a computer with graph capability is required.

GRADING:

Homework ----140 points	A: 93% - 96 % , 465 - 500 pts	C+: 76% - 79 % , 380 - 399 pts
Quizzes --------80 points	A– : 90% - 92 % , 450 - 464 pts	C: 70 % - 75 %, 350 - 379 pts
2 midterms --- 160 points	B+: 87% - 89 % , 435 - 449 pts	D: 60 % - 69 %, 300 - 349 pts
Final exam ---- 120 points	B: 83% - 86 % , 415 - 434 pts	F: 0 % - 59 %, 0 - 299 pts
Total ----------- 500 points	B–: 80% - 82 % , 400 - 414 pts	

Homework Points: You need to do your homework on a regular bases. <mark>However all homework is due on August 5, Wednesday, 11:59 pm.</mark> Total points on WebAssign is 1470(subject to change). Out of which, 1420 points are required (subject to change). If you have 1420, you earn 140 points (full credit) toward your grade. If you have total of 1470, then 1470/1420, that is 103.52%, $103.52\% \times 140 \approx 145$, you have 5 points extra credit. The total amount of the extra credit will be decided after the final exam.

Quiz Points: <mark>4 quizzes each week</mark> (3 quizzes if a week has exam), <mark>due Sundays 11:59 pm</mark>, available 1 week before due. **NO EXTENSION under any circumstances**. If the deadline is missed, you get 0 for the quiz. There are 19 quizzes this quarter. 3 lowest scores will be dropped.

Exams and Points: Exam 1- Wed., July 15, 6 - 7:30 pm ; Exam 2 – Wed., July 29, 6 – 7:30 pm NO make exam. Missed exam is counted as 0. If the percentage of your final exam score multiply by 80 is higher than one of your exams, it will replace the lowest exam score. It can only replace 1 out of 2 exams. For example: your lowest exam score is 60 (out of 80), your achieve 100/120 on the final exam, which is 83%; (83%)(80)=66. Then the 60 on the exam is replaced by 66. If both of your exams are higher than your final exam percentage, then your exam scores will not change. People doing better on the final will help their overall score.

FINAL EXAM: 120 points. <mark>August 6, Thursday, 6 – 8 pm</mark>. **Fail to take the final exam, you will receive "F" for your grade.**

Exams and quizzes are to test your understanding of the classroom discussions and homework assignments. **Notes and graphic calculator are allowed for quizzes and exams**

IMPORTANT DATES: Monday, July 6 --- Last day to drop without grade on you record.
                              Friday, Aug. 7 --- Last day to drop with a "W".

Student is responsible to drop or withdraw from the class.

Math 1A-02   Summer 2020 Calendar

	Topic
2.1	The Tangent and Velocity Problems
2.2	The Limit of a Function
2.3	Calculating Limits Using the Limit Laws
2.4	The Precise Definition of a Limit
2.5	Continuity
2.6	Limits at Infinity: Horizontal Asymptotes
2.7	Derivatives and Rates of Change
2.8	The Derivative as a Function
3.1	Derivatives of Polynomials and Exponential Functions
3.2	The Product and Quotient Rules
3.3	Derivatives of Trigonometric Functions
3.4	The Chain Rule
3.5	Implicit Differentiation
3.6	Derivatives of Logarithmic Functions
3.7	Rates of Change in the Natural and Social Sciences
3.8	Exponential Growth and Decay
3.9	Related Rates
3.10	Linear Approximation and Differentials
4.1	Maximum and Minimum Values
4.2	The Mean Value Theorem
4.3	How Derivatives Affect the Shape of a Graph
4.4	Indeterminate Forms and L'Hospital's Rule
4.5	Summary of Curve Sketching
4.7	Optimization Problems
4.8	Newton's Method
4.9	Antiderivatives

	Monday	Tuesday	Wednesday	Thursday
June / **July**	29 2.1, 2.2	30 2.2, 2.3 Quiz 2.2	1 2.3, 2.4 Quiz 2.3	2 2.5, 2.6 Quiz 2.5
July	6 2.6, 2.7 Quiz 2.6	7 2.7, 2.8 Quiz 2.8	8 3.1, 3.2 Quiz 3.2	9 3.3, 3.4 Quiz 3.3
July	13 3.4, 3.5 Quiz 3.4	14 3.6, 3.7 Quiz 3.6	15 Review Exam 1	16 3.8, 3.9 Quiz 3.9
July	20 3.10 Quiz 3.10	21 4.1 Quiz 4.1	22 4.2 Quiz 4.2	23 4.3 Quiz 4.3
July / **Aug**	27 4.4 Quiz 4.4	28 4.5 Quiz 4.5	29 Review Exam 2	30 4.7 Quiz 4.7
Aug	3 4.8 Quiz 4.8	4 4.9 Quiz 4.9	5 Review	6 **Final** 6-8 p

Student Learning Outcome(s):

*Analyze and synthesize the concepts of limits, continuity, and differentiation from a graphical, numerical, analytical and verbal approach, using correct notation and mathematical precision.
*Evaluate the behavior of graphs in the context of limits, continuity and differentiability.
*Recognize, diagnose, and decide on the appropriate method for solving applied real world problems in optimization, related rates and numerical approximation.