DVC – Math 192 Syllabus

"You can't direct the wind – but you can adjust the sails."

Course:	Math 192, Calculus 1, Sec 9144
Location:	San Ramon Campus - Room E164
Instructor:	Mr. Narin
Term:	Fall 2025, Sep 9th – Dec 11th
Time:	T, Th 11:10am – 2:15pm
Class Website:	*MathWithSteve.com*
Email:	SteveNarin314@gmail.com
Office Hours:	T, Th 2:15pm – 3:15pm

SRC Academic Support Center

M–Th 9:30am – 3:00 pm

Required

Text: The bookstore will know exactly what you need: any package which includes Stewart's *Calculus, Early Transcendentals*, 9E, and WebAssign. You should also check out **Cengage.com**. It might be cheaper there.

Calculator: A simple scientific calculator will be perfect for this class — just look for the SIN button — TI recommended; it's about $13 and will be allowed on every quiz and test. No graphing calculators (or anything that does algebra or calculus) are allowed.

We will also use a graphing program on the web called **Desmos**. There's nothing to install — it runs right in your browser.

Email: As a DVC college student, you are required to check your school email account regularly — that means at least a few times each day.

Grading Components

24 **Quizzes** @10 pts each

4 **Tests** @100 pts each

Homework

The problems I assign are designed to inform you as to what skills and concepts you are supposed to be gaining from this class. In other words, you need to do as much homework as you need to — whatever it takes to achieve the degree of success that you desire. In short, it's up to you to discover the homework strategy that suits your personal learning style. Because of this policy, homework is *not* counted toward your grade.

Quizzes

A quiz will be given at the end of each class meeting (except for the four test days). Quiz #1 will be given the first day of class. The quizzes cover primarily the previous lecture, and quite likely previous quizzes. If a quiz does cover earlier material, it will be made clear in the **Homework** part of the **Schedule**. There are NO make-ups on quizzes, however, two of them can be dropped (but neither of the last two).

Tests

There will be four major tests. The tests will contain

a) T/F: 10%

b) Multiple-Choice/Matching: 20%

c) "Show Your Work" questions (with partial credit quite possible): 70%
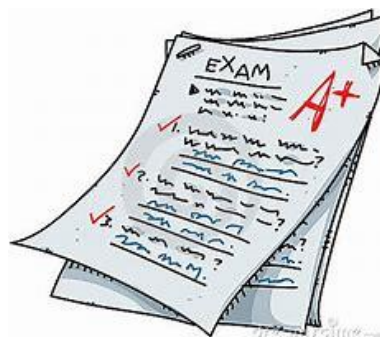
Our class time is about three hours per session, which I believe is too long for a Calc test or a test review, so on test days and review days the first 60 to 90 minutes will be spent covering new material (which is <u>not</u> on the test).

Letter Grades

A – 90% and up

B – 80% to 89%

C – 70% to 79%

D – 60% to 69%

F – below 60%

Live as if you were to die tomorrow.

Learn as if you were to live forever.

Mahatma Gandhi

Academic Dishonesty

Click the following link: *Academic Integrity Policy*

That document should answer all your questions regarding this issue.

Please note that — if caught cheating — the consequences I impose will be as harsh as the DVC policy allows.

Student Learning Outcomes and Course Content

Course Objectives

Upon completing MATH 192, you will be able to
- Compute the limit of a function at a real number.
- Determine if a function is continuous at a real number.
- Find the derivative of a function as a limit.

- Find the equation of a tangent line to a function.
- Compute derivatives using differentiation formulas.
- Use differentiation to solve applications such as related rate problems and optimization problems.
- Use implicit differentiation.
- Graph functions using methods of calculus.
- Evaluate a definite integral as a limit.
- Evaluate integrals using the Fundamental Theorem of Calculus.
- Apply integration to find area.

Content

A. Definition and computation of limits using numerical, graphical, and algebraic approaches
B. Continuity and differentiability of functions
C. Derivative as a limit
D. Interpretation of the derivative as: slope of tangent line, a rate of change;
E. Differentiation formulas: constants, power rule, product rule, quotient rule and chain rule
F. Derivatives of transcendental functions such as trigonometric, exponential or logarithmic
G. Implicit differentiation with applications, and differentiation of inverse functions
H. Higher-order derivatives
I. Graphing functions using first and second derivatives, concavity and asymptotes
J. Maximum and minimum values, and optimization
K. Mean Value Theorem
L. Antiderivatives and indefinite integrals
M. Area under a curve
N. Definite integral; Riemann sum
O. Properties of the integral
P. Fundamental Theorem of Calculus
Q. Integration by substitution
R. Indeterminate forms and L'Hopital's Rule

"Wisdom begins in wonder."

Socrates