

CLASS MODE: 80% in person and 20% asynchronous.

In person time and location: M,T,W,Th 9:30-10:20am in S-16, students are required to attend lecture, take note, and collaborate.

Asynchronous time: Students are required to do weekly section quizzes, Canvas discussions, and additional classwork.

Instructor: Vinh Kha Nguyen

How to contact instructor: nguyenvinh@fhda.edu or Canvas Inbox the instructor (preferably)

Office hours: M,W, Th 1:30-2:20pm on Zoom (see Canvas course for zoom link)

T 1-1:50pm in S-76d

Textbook: Calculus Early Transcendentals, 9th edition by James Stewart. (eText or .pdf copy is ok)

Required Materials: Textbook and a calculator

Grade is composed of homework, quizzes, discussions, exams, and final.

0-59.99% F

70-76.99% C

80-82.99% B-

90-92.99% A-

60-69.99% D

77-79.99% C+

83-86.99% B

93-100% A

87-89.99% B+

homework	quizzes	discussions	exams	final	total
70pts	100pts	30pts	180pts	120pts	500pts

Homework: each hw due date is posted on the course calendar and Canvas Grade tab. *Late homework gets 0pts regardless of excuses. Student must submit hw on Canvas using the Grades tab by its due date to get credit.*

Discussions: discussion and its due date are posted on the course Canvas Grade tab. *Missed discussion gets 0pts regardless of excuses.*

Quiz: each section quiz is on open Monday and must be completed by Sunday on Canvas. *Missed quiz gets 0pts regardless of excuses.*

Exam: each exam date is posted on the course calendar and must be taken in person. *Missed exam gets 0pts regardless of excuses.*

Final: comprehensive and given in a specific date and time during final week. There is no make-up for final exam.

If student notices that the instructor made an error on the grading, the student is responsible to inform the instructor within a week of the date of the exam/quiz. Otherwise, the student's score on the exam/quiz will be unchangeable.

Makeup Policy: No makeup quizzes or exams are available. Student must notify the instructor in advance of a missed exam to use the following makeup policy.

Only 1 missed exam due to an excused absence or emergency will be covered by the final exam (half point).

Exam procedure/policy:

- Each exam is 50 minutes, and there is no dropping lowest exam score.
- The Final Exam is 2 hours. (see course calendar for detail)
- Make sure you have fully studied and prepared before you take each exam. (see Canvas Modules for outlines)
- **All exams must be taken in class in person.**
- **No calculator, phone, and restroom break are allowed during quizzes and exams.**

Academic Dishonesty: Students will get 0pt on the related assignments if:

- Cheat on exams and assignments.
- Copy other's work as their own.
- Only include the final answer, but do not show any work or offer any explanation.
- Alter work on exam/quiz after it has been graded to deceive the instructor.
- **Sharing/Uploading instructor's exams or a part of the exam online for others to view will result in a failing grade.**

Repeated academic dishonesty will result in a failing grade in the course. Moreover, all academic dishonesty instances will be reported to the college!

Time Commitment: Students are also expected to spend at least 10 hours each week outside of class to do homework and study for quizzes and exams.

Grade improvement: This class is rigorous, so it can be fast-paced and challenging quite often during the quarter. The only way to build confidence is through practice and more practice. Other strategies to improve grade: take detailed note during lecture, ask

questions when in doubt, work with classmates during group work, form study group, do hw sooner than later, seek help when need help, understanding rather than memorizing, prioritize tasks, do not multi-tasking while studying, etc.

If you are interested in improving your grade, please spend time to study and do the homework.

Campus tutoring, additional assistance, and Internet resources:

- On campus tutoring in S43: <https://www.deanza.edu/studentsuccess/mstrc/>
- Online tutoring: <https://www.deanza.edu/studentsuccess/onlinetutoring/>
- Student's services: <https://www.deanza.edu/services/>
Disability Support Service, EOPS, Veterans, CalWORK, Foster Youth, Food Pantry, Health Service, etc.
- The Internet: Youtube lecture video, Khan Academy, Paul's note, Wolfram Alpha, Microsoft Math Solver, Desmos, GeoGebra, etc.

Students Responsibility:

- Read the syllabus word by word and honor the syllabus.
- Attend lecture, take note, and study problems on the note before working on homework.
- Collaborate with classmates and the instructor during group work and in-class activities.
- Do and submit all assignments on time.
- Do homework outside of class before the next lecture to stay current with the materials.
- Study and prepare for quizzes and exams.
- Read textbook for more examples.
- Behave as educated and civilized individual, to be hold accountable for your actions.

Attendance: Students are expected to attend all class meetings, arrive on time, take note, and stay for the entire class. The instructor reserves the right to drop/withdraw students who are absent more than five lectures during the quarter. Moreover, **showing up after roll call is counted as one late. Two lates = 1 absence.**

Withdrawal/Drop Policy: It is the ultimate responsibility of the student to drop the class. Do not rely on the instructor to drop. A student who stops coming to class, stops working on assignments, and fails to withdraw by the deadline will get a grade FW.

Smartphone Use: All smartphones must be on silent mode and put away during lecture. We do not learn how to text or search the Web in this class, so there is no reason to have smartphones out during class unless the instructor allows.

Expected Student Conduct: A student who is disruptive will be asked to leave the class. A student who refuses to leave the room will be dropped from the class and will be reported for further action. During the quarter, if you have any questions about the course policies, you will be first referred to this syllabus. Please make sure you keep a copy. You can find Foothill-De Anza College Code of Conduct at <https://www.deanza.edu/student-development/conduct.html>

Accommodation: Students who need additional accommodation, due to a learning disability or some other reason, please contact the instructor during the first two weeks of class to discuss your options. Disability Support Services determines accommodations based on appropriate documentation of disabilities. DSS is located in Student Community Services building room 141, and their phone number is (408) 864-8753.

All students registered for this course will be expected to uphold the following values:

We strive to establish a class atmosphere that is welcoming and inclusive so that students may bring their authentic selves and work to reach their potential. We recognize the value and individuality that each student brings – our learning experience becomes all the richer when we hear from different perspectives. As such, we support all students equally, without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, age, or veteran status.

Course description: This course explores partial derivatives, multiple integrals, vector calculus, and their applications.

Course SLOs:

Upon successful completion of the course, students will be able to:

- Apply analytic, graphical and numerical methods to study multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
- Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
- Synthesize the key concepts of differential, integral and multivariate calculus.

Tentative Course Calendar

M	T	W	Th
1/06 Syllabus&Canvas 2.1 tangent & velocity prob.	1/07 2.2 limit using def. & graphs	1/08 2.3 limits using limit laws	1/09 2.3 limit of piece-wise and absolute value functions
1/13 Hw#1 due 2.5 continuity, Intermediate Value Theorem	1/14 2.6 Limits at infinity	1/15 2.6 HA &VA	1/16 2.7 derivative & rate of changes
1/20 Holiday NO CLASS	1/21 2.8 derivative as a function	1/22 2.8	1/23 Hw#2 due EXAM#1
1/27 3.1 Power Rule	1/28 3.2 Product rule	1/29 3.2 Quotient rule	1/30 3.3 derivatives of trig
2/03 Hw#3 due 3.4 Chain Rule	2/04 3.4	2/05 3.5 implicit differentiation	2/06 3.6 deriv of inverse trig
2/10 3.6 deriv of logarithm	2/11 3.9 Related Rates	2/12 3.10 Linear Approx and Differentials	2/13 Hw#4 due EXAM#2
2/17 Holiday NO CLASS	2/18 4.1 Absolute min/max	2/19 4.2 Mean Value Theorem and the First Derivative Test	2/20 4.3 Derivative Tests and Curve Sketching
2/24 Hw#5 due 4.3 cont.	2/25 4.4 indeterminate forms	2/26 4.4 L'H Rule	2/27 4.4 cont.
3/03 4.7 Optimization	3/04 4.7	3/05 4.7	3/06 Hw#6 due EXAM#3
3/10 4.8 Newton's approx	3/11 4.9 anti-derivatives	3/12 4.9 applications of anti-derivatives in solving DE	3/13 4.9 cont.
3/17 10.1 Parametric Equations	3/18 10.2 Derivatives of parametric Equations	3/19 Limit review	3/20 Derivative review
3/24 Hw#7 due	3/25 FINAL EXAM 9:15-11:15AM	3/26	3/27

1/19 Last day to add/drop

1/21 Census

2/28 Last day to drop with a W

3/24-3/27 Final Exam week, no lecture

Math 1A Homework

(see Canvas for due date, scan and upload files in .pdf format)

- Homework is graded on completeness and neatness, see tentative course calendar for due date.
 - Must show work for each problem. Hw without show work will be -1pt.
 - Submit one file per section. If not, hw will be -1pt.
 - Name each file to match with the hw description. If not, -1pt.
 - Deduct points from each missing problem depending on the amount of problems in each hw.
- Why should students care about showing work?
 - **Practice makes confidence**
 - **Help to prepare for quizzes and exams**
- Students are responsible to do all homework and submit the work on time,
 - Late hw gets a solid 0pt, so do not submit late hw.

Hw#1

2.2 #2, 5, 10, 11, 23, 27, 29, 31, 33 pg. 92-93

2.3 #11, 13, 15, 17, 19, 21, 23, 27, 29, 31, 41, 43, 51, 52, 53 pg. 102-104

Hw#2

2.5#5, 19, 21, 39, 41, 42, 47, 53, 57 pg. 124-126

2.6#3, 15, 17, 21, 32, 37, 47, 49, 51, 68 pg. 137-139

2.7#5, 11, 13, 17 pg. 149

2.8#3,12,13,21,27,31, 41, 43, 49 pg. 162-164

Hw#3

3.1#5,7,9,13,17,19,23,39,41,53,59,60,83 pg. 181-183

3.2 #5,9,10,11,16,31,35,43,56 pg. 189-190

3.3 #1, 3, 5, 7, 11, 13, 15, 21, 39, 41, 63 pg. 197-199

Hw#4

3.4 #7, 9, 11, 13,15,17,39,41,57,59,65,81 pg. 206-208

3.5 #5,9,13,15,17,27,31,63 pg. 214-216

3.6 #3,5,7,9,11,27,31,43,45,47,51,63,65,67 pg. 224-225

3.9 #3,5,7,17,25,27,39,47 pg. 251-254

3.10 #1,3,11,15,31,33,41,43 pg. 258-259

Hw#5

4.1 #51,53,57,59,61,63 pg. 287

Hw#6

4.3 #5,6, 45,53,57,61,63,75 pg. 305-307

4.4 #9,13,17,19,21,31,35,43,45,47,51,57,59 pg. 316-317

4.7 # 7,8,13,14,18,19,23,25,40,46,57,69 pg. 342-346

Hw#7

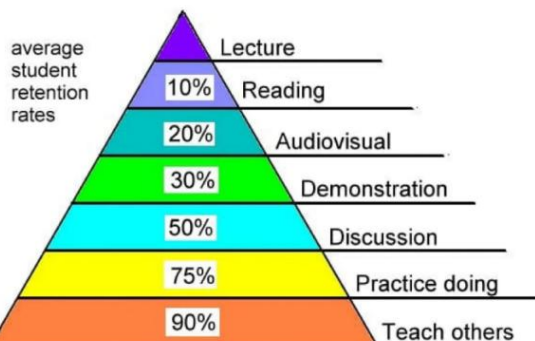
4.8 #11,13,17,19 pg. 355

4.9 #5,9,13,15,17,19,21,27,29,33,39,41,71,75,81,83 pg. 361-363

10.1 #7,8,9,10,11,12 pg. 668

10.2 #1,2,3,4,5 pg. 679-680

Learning Pyramid



Source: National Training Laboratories, Bethel, Maine

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.

Office Hours:

M,W,TH 01:30 PM 02:20 PM Zoom Zoom

T 01:00 PM 01:50 PM In-Person S-76d