

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

**In person time and location:** M,T,W,Th 12:30pm-1:20pm in G-6, 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. The Canvas course will be available for students on access on the first day of class.

**Instructor:** Vinh Kha Nguyen

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

Allow the instructor 24 hours to reply to a canvas inbox message or an email or a comment made on canvas.

Allow the instructor 72 hours to grade and comment on the exams and other assignments after its due date.

**Office hours:** M,T,W,Th 9:50-10:20am in S-76d

W, Th 2:30-3:20pm on Zoom (see Canvas course for zoom link)

**Textbook:** Calculus I: Differential Calculus by Bambhania, Fisher, Mesh, Tran. Libretext OER.

**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
50pts	70pts	30pts	210pts	140pts	500pts

**Homework:** each hw and due date are posted on Canvas. Late homework receives 0 points.

**Discussions:** each discussion and due date are posted on Canvas. Missed discussion receives 0 points.

**Quizzes:** each quiz and due date are posted on the course Canvas. Missed quiz receives 0 points.

**Exams:** each exam and due date are posted on the course calendar and must be taken in class in person. All exams are comprehensive, focusing on the knowledge and skills students have developed throughout the course. Missed exam receives 0 points.

**Final:** comprehensive and given at 11:30am-1:30pm on Weds June 24<sup>th</sup> in the classroom. 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 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 (equivalent percent).**

**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:** As stated in the De Anza College course catalog, students are expected to spend at least 5 hours each week participating in class lectures and class activities. Students are also expected to spend at least 10 hours each week doing homework and studying.

**Grade improvement:** This class is rigorous, so it can be fast-paced and challenging quite often during the semester. The only way to build confidence is through practice and more practice. Other strategies to improve grade: take detailed notes, ask questions when in doubt, work with classmates during group work, form study group, do hw sooner rather than later, seek help when needed, understand rather than memorize, prioritize tasks, avoid multi-tasking while studying, etc. **If you are interested in improving your grade, please spend more time studying and doing the homework.**

**Campus tutoring, additional assistance, and Internet resources:**

- On campus tutoring in S43: <https://www.deanza.edu/studentssuccess/mstrc/>
- Online tutoring: <https://www.deanza.edu/studentssuccess/onlinetutoring/>
- Student Services: <https://www.deanza.edu/services/>  
Disability Support Service, EOPS, Veterans, CalWORK, Foster Youth, Food Pantry, Health Services, etc.
- The Internet: Youtube lecture video, Khan Academy, etc.

**Student Responsibilities:**

- Read and follow the syllabus carefully.
- Participate in lectures, take notes, and study problems on the note before working on homework.
- Read the textbook for more examples.
- Complete and submit all assignments on time.
- Study and prepare for quizzes and exams.
- Behave as an educated and civilized individual and be held accountable for your actions.

**Attendance:** Students are expected to attend lectures in person and complete all weekly assignments on Canvas. If a student misses a week of class both in person lectures and weekly assignments, the student may be dropped from the course.

**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 working on assignments and fails to withdraw by the deadline will get a grade FW.

**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 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 covers the fundamentals of differential calculus.

**Course SLOs:**

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

- 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.

Tentative Course Calendar (students are responsible to check Canvas weekly for assignments and due dates)

M	T	W	Th
4/06 Syllabus&Canvas 2.1 A Preview of Calculus	4/07 2.2 limit using def. & graphs	4/08 2.3 limits using limit laws	4/09 2.3 limit of piece-wise and absolute value functions
4/13 2.4 continuity, Intermediate Value Theorem	4/14 3.1 derivative at a point	4/15 3.2 derivative as a function	4/16 3.2 differentiability
4/20 3.3 Power Rule & Product Rule	4/21 3.3 Quotient Rule	4/22 Review on limits and derivative rules	<b>4/23</b> <b>EXAM#1</b>
4/27 3.4 Derivates as rate of changes	4/28 3.5 Derivatives of Trig	4/29 3.6 Chain Rule	4/30 3.6 Chain Rule
5/04 3.8 implicit differentiation	5/05 3.9 deriv of exponential & log	5/06 3.9 deriv of exponential & log	5/07 3.7 Derivatives of Inverse Trig
5/11 4.1 Related rates	5/12 4.1 Related Rates	5/13 Review on derivatives	<b>5/14</b> <b>EXAM#2</b>
5/18 4.2 Linear Approximation	5/18 4.2 Differentials	5/20 4.3 Maxima and minima	5/21 4.4 Mean Value Theorem 4.5 Derivative and shape of graph
5/25 Holiday NO CLASS	5/26 4.6 Limits at Infinities and Asymptotes	5/27 4.7 L'H Rule	5/28 4.7 L'H Rule
6/01 4.8 Optimization	6/02 4.8 Optimization	6/03 4.8 Optimization	<b>6/04</b> <b>EXAM#3</b>
6/08 4.9 Newton's approx	6/09 4.10 anti-derivatives	6/10 4.10 applications of anti-derivatives in solving DE	6/11 4.10 applications of anti-derivatives in solving DE
6/15 10.1 Parametric Equations	6/16 10.2 Derivatives of parametric equations	6/17 Final review	6/18 Final Review
6/22	6/23	<b>6/24</b> <b>FINAL EXAM</b> <b>11:30AM-1:30PM</b>	6/25

4/19 Last day to add/drop

4/20 Census

5/29 Last day to drop with a W

6/22-6/26 Final Exam week, no lecture

## Math 1A Homework

(see Canvas for due date, 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.

NOTE: To scan and upload hw on Canvas with your phone, I recommend the free Adobe Scan app. It is ok to write your hw on an ipad or tablet and convert it to .pdf files to upload on Canvas.

### Hw#1 (due sun week#1)

2.2E #2,3,8,18,19,20,21,23,24,25,26

2.3E #11,14,15,16,17,18,19,20,33,34

### Hw#2 (due sun week#3)

2.4E #1,3,6,15,16,17,18,19

3.1E #11,12,13,15,16,19,21,23,25,27

3.2E #1,2,4,7,8,10,13,22

3.3E #3,7,8,10,11,12,39,42

### Hw#3 (due sun week#4)

3.4E #4,5,7

3.5E #3,4,5,6,9,10,23,24,31,32

3.6E #15,17,19,21,22,23,28,29

### Hw#4 (due sun week#6)

3.7E #23,24,25,26,27,28

3.8E #2,4,6,8,10,18

3.9E #1,3,5,7,9,11,17,21

4.1E #5,7,14,16,20,23,30

### Hw#5 (due sun week#7)

4.2E #5,7,9,19,38,39,40

4.3E #21,23,25,27,28,29, 41, 45

(4.4E) #15,17,19,36

(4.5E) #33,40,43,48

### Hw#6 (due sun week#9)

4.6E #11,13,15,17,19,23,28,31

4.7E #13,15,17,19,21,23,25,27,29,31,33,35,37,39,41

4.8E #6,10,11,12,43,44,45

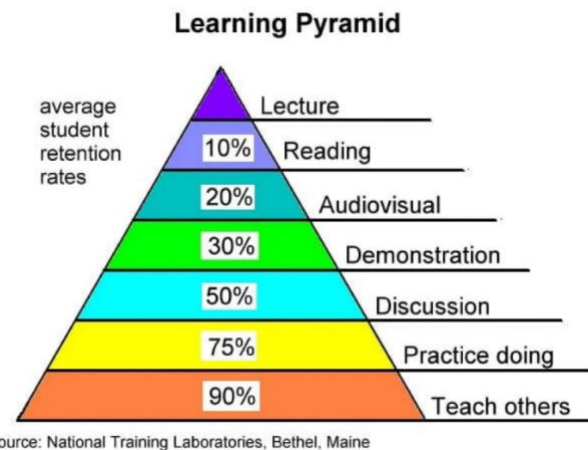
### Hw#7 (due sun week#11)

(4.9E) #3,4,5,6,22

4.10E #3,4,8,9,10,11,24,25,29,33,35

5.1E #1,3,17,39,41,42

(5.2E) #5,7,9



**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,T,W,TH 9:50 AM - 10:20 AM

S76-d

W,TH 2:30 PM - 3:20 PM

Zoom