Calculus

CLASS MODE: 100% in person.

In person time and location: M,T,W,Th 10:00-12:15pm in MLC-260

Instructor: Vinh Kha Nguyen

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

 Textbook:
 CALCULUS: EARLY TRANSCENDENTALS, 9th edition by James Stewart. An eText or .pdf textbook is ok to use, get access to eTextbook instantly for less than \$50.

 https://www.cengage.com/c/calculus-9e-stewart/9781337624183PF/

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
60pts	90pts	30pts	160pts	100pts	440pts

Homework: each hw due date is posted on the course Canvas and is due on Sunday except the last hw which must be due on the date of the final exam. *Late homework gets Opts regardless of excuses.*

Student must submit hw on Canvas using the Grades tab by its due date to get credit.

Discussions: each discussion is posted on the course Canvas and due on Sunday. *Missed discussion gets Opts regardless of excuses*. **Quiz:** each quiz date is posted on the course calendar and is due in person. *Missed quiz gets Opts regardless of excuses*. **Exam:** each exam date is posted on the course calendar and is due in person. *Missed exam gets Opts 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 you notice that the instructor made an error on the grading, you are responsible to inform the instructor within a week of the date of the exam/quiz. Otherwise, your 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 quiz or a missed exam to use the following makeup policy.

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

Exam procedure/policy:

- Each exam is 90 min, 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 and final exam must be taken in class in person.
- No Ti-83/84 or advanced calculator is allowed on exams and final exams.

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

- Cheat on exams and assignments
- Copy other's work as their own
- Alter work on exam/quiz after it has been graded to deceive the instructor
- 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 two hours outside of class for each hour spending in 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.**

Do not expect or rely on extra credit because there is none in this class.

Students are expected to be serious about this course on the first day of class.

Campus tutoring, additional assistance, and Internet resources:

- On campus tutoring in S43: <u>https://www.deanza.edu/studentsuccess/mstrc/</u>
- Online tutoring: <u>https://www.deanza.edu/studentsuccess/onlinetutoring/</u>
- Student's services: <u>https://www.deanza.edu/services/</u> 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. A 15 minute late to class is counted as an absence. The instructor reserves the right to drop/withdraw students who are absent more than five lectures during the quarter. However, a student who discontinues coming to class and does not drop the course will get an F. It is the student's responsibility to drop 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.

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

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 accommodations, 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 SLOs:

- 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.

Tentative Course Calendar

М	Т	W	Th
7/03 Syllabus & Canvas	7/04 Holiday	7/05	7/06 Hw#1 due by Sun
11.1 sequences	No class	11.2 series, test of	Quiz#1
		divergence	11.4 Comparison test
		11.3 integral test	
7/10	7/11	7/12	7/13 Hw#2 due by Sun
11.5 Alternating series	11.6 ratio and root test	11.8 Power series	EXAM#1
test	11.7 strategies of testing	Radius & interval of	
		convergence	
7/17	7/18	7/19	7/20 Hw#2 due by Sun
11.9 Functions as Power	11.10 Taylor series	11.11 Application of	Quiz#2
series		Taylor series	10.4 Calculus in polar
		10.3 Polar coordinates	coordinates
7/24	7/25	7/26	7/27 HW#4 due by Sun
12.1 3D-coord system and simple surfaces	12.2 Vectors	12.3 Dot Products	EXAM#2
7/31	8/01	8/02	8/03 Hw#5 due by Sun
12.4 Cross Product	12.5 Equations of lines	13.1 Vector function and	Quiz#3
	and planes	vector space	13.2 Derivatives and
			integrals of vector
			functions
8/07	8/08	8/09	8/10 HW#6 due
13.3 Arc Length and Curvature	13.4 Motion in space	Catching up	FINAL EXAM

7/10 Last day to add 7/11 Census 8/01 Last day to drop with a W

Math 1C Homework

- 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 for each section
 - Submit one file per section. If not, hw will be -2 pts. (Do not combine all sections into a single file)
 - \circ Name each file to match with the hw description. If not, -1pt per section not naming.
 - Organize your files to match the order on the hw description. If not, -1 pt.
 - o Deduct points from each missing section depending on the amount of problems in it.
- Why should students care about showing work?
 - Practice makes confidence
 - Help to do similar problems much faster on exam
- 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

11.1 #3,7,17,21,27,29,31,33,37,41 pg. 735-736 11.2 #15,17,21,27,31,35,39,41,43,49,(59),(61) pg. 747-749 11.3 #3,7,9,11,15,17,19,23,25,27 pg. 758-759 Hw#2 11.4 #5,7,9,11,15,17,23,25,27,29,35 pg. 764-765 11.5 #3,5,7,13,15,19,23,25,27,29 pg. 772-773 11.6 #3,5,7,11,15,21,23,27,29,31 pg. 778 11.7 #3,5,7,9,13,17,19,21,27,35 pg. 781 Hw#3 11.8 #3,7,11,15,19,31,35 pg. 786 11.9 #3,7,9,11,17,19,21,27,29 pg. 793 11.10 #11,15,17,23,25,27,39,43,45,(59),(61),(83),(85),(87),(89) pg. 808-810 11.11 #3,5,7,13,19,21 pg. 818 Hw#4 10.3 #7,9,15,17,19,21,23,25,37 pg. 692-693 10.4 #5,7,9,11,29,31,37,39,49,53 pg. 700-701 12.1 #5,7,9,13,15,19,21,27,35,37 pg. 835 12.2 #9,13,19,21,23,25,31,33,35 pg. 844-845 12.3 #5,7,9,17,19,23,41,43,49,51 pg. 852-854 Hw#5 12.4 #1,3,7,13,17,19,39,43 pg. 861-863 12.5 #1,3,5,7,9,13,17,23,25,31,35,37,39,41,43,57 pg. 872-874 13.1 #1,3,5,7,9,11,13,21,31,33 pg. 895-896 Hw#6 13.2 #3,5,7,9,11,13,19,21,25,(37),(39),(41) pg. 902-903 13.3 #3,5,7,19,21,23,27,31,53 pg. 913-914 13.4 #3,7,19,23,25,26,27,37,39 pg. 924

Student Learning Outcome(s):

• 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.

Office Hours: