Math 1C (M-F 9:30 – 10: 20)   Fall 2018

Infinite series, lines and surfaces in three dimensions, vectors in two and three
dimensions, parametric equations of curves. Derivatives and integrals of vector functions.

Instructor	Doli Bambhania
E-mail	bambhaniadoli@fhda.edu
Office	S-43A
Phone	408-864-5382 (for voice messages only, as I'm unlikely to be in my office)
Office Hours	Monday – Thursday 9:00 – 9:20 a.m. and 1:30 – 2:00 p.m.

Required Materials:

- Textbook: Stewart, **Calculus: Early Transcendentals**; 8th edition. We will **not** be using software-based homework on WebAssign.

- A graphing calculator is required for this class: TI83, TI83+, TI84, TI84+ are recommended. On quizzes and exams, you may **not** use a calculator that can do symbolic manipulation (or computer algebra) such as TI-89 or TI-92.

Attendance: I expect each student to attend every class. If you need to miss a class for an important reason, please know that you are responsible learning the missed material, finding out any announcements or assignment changes made in class. Stay in touch with your classmates and me. Let me know what I can do to help you stay on top of the material. If you exceed more than one week's worth of absences, you should consider dropping the class. If you stop coming to class, you are responsible for dropping yourself or you will receive an F.

Homework: We will have written homework from the textbook for every section we cover. See the last page of the syllabus. The best way to ensure success in any math class is doing all of the assigned homework neatly, correctly and in a timely manner, making sure you really understand what you are doing! Time spent on the homework will directly benefit you on quizzes and exams.

Write your homework out in full detail, as modeled in the textbook and in class. There is a strong emphasis on how the solutions are written up in this class. You will lose points if your homework is sloppily done and/or incomplete.

HW Guidelines:
- *Do the problems in order, showing all work neatly, clearly and completely*
- *Label each section and problem – highlight or put a box around section and problem number*
- *Combine all sections and pages, in order, and turn in ONE stapled packet*

Homework assigned on Monday and Tuesday will be due on Friday. Homework assigned on Wednesday, Thursday, Friday will be due the following Tuesday. Late HW will not be accepted. If you will not be in class on the day the HW is due, scan it and send it to me via email. Your homework will be graded for completeness (having made a thoughtful and coherent attempt at each problem).

Entrance Cards: Entrance cards consist of a problem similar to the previous days' material, and may be posted at start of class on any day! They will be unannounced and graded. Notes will be allowed on entrance cards. Missed entrance cards cannot be made up. *Please keep several neatly cut <u>half sheets</u> of paper ready in your binder for when they are given. You will lose points for turning in untidy sheets of paper.*

Quizzes: We will also have the several 15-20 minute, in-class quizzes. See the calendar. The **lowest** quiz score will be **dropped**. There will be NO MAKEUPS for the quizzes.

Exams: We will have three 50-minute midterm exams. There will also be a cumulative final exam. All exam dates are on our calendar. There will be NO MAKEUPS for any of the exams. The final exam percentage will replace your lowest midterm exam score if the final exam score is higher than it. This rule will also apply in case of a missed midterm exam. *This rule will NOT be applied if cheating was involved in any of the exams.*

Please note that the final exam is a requirement for the class. As with the midterm exams, the final exam cannot be made up or rescheduled. The only exception to this is with an 'Incomplete', which can be given in case of an unforeseen emergency or illness, due to which you cannot take the final exam. An 'Incomplete' requires sufficient documentation.

Evaluation: Your overall grade will be computed as follows.

Homework: Top 25 @ 4 pts each	100 points
Entrance cards: Top 5 @ 4 pts each	20 points
Quizzes: Top 6 @ 15 pts each	90 points
Midterms @ 100 pts each	300 points
Final Exam	140 points
TOTAL	**650 points**

Overall percentage	Your grade will be at least
97 % or greater	A+
92 – 97%	A
89 – 92 %	A-
87 – 89 %	B+
82 – 87 %	B
79 – 82 %	B-
75 – 79 %	C+
70 – 75 %	C
55 – 70 %	D
less than 55%	F

Help: There is help available to you throughout the quarter. You are welcome to come to my office hours. If you cannot make it and need help on other days or at other times, email me and we can make an appointment. I can often answer many questions over e-mail. For homework questions over email, for a quicker response, please write down the question rather than giving the question number, tell me briefly what you have tried and what your specific question is. Also, don't forget the Math Science Tutorial Center in S-43 (http://www.deanza.edu/studentsuccess/tutorial/)! The tutorial center is staffed with people highly qualified to help you in many subjects. There will be group tutoring for your class – details will be given in class.

Academic Integrity: All students in this class are expected to <u>exercise academic integrity</u> throughout the quarter. Any instances of cheating or plagiarism will result in disciplinary action, which may include recommendation for dismissal. You are encouraged to work together on homework but simply copying down answers from another student's homework or from some website is simply wrong. Also, it will be of no help to you on the quizzes and exams! Cheating on a quiz or an exam will result in getting a 0 on it, an 'F' in the course and/or dismissal from the class. Also, **each incident of cheating** will be reported to the **Dean** of the Physical Science, Mathematics and Engineering Division.

Disability Notice: If you feel that you may need an accommodation based on the impact of a disability, you should contact me privately to discuss your specific needs. Also, please contact Disability Support Services (864-8753) or Educational Diagnostic Center (864-8839) for information or questions about eligibility, services and accommodations for physical (DSS), psychological (DSS) or learning (EDC) disabilities.

Tips for Success:

1. **Form a study group**. Exchange contact information with at least 3 people in the class. This will come in handy if you miss a class, or if you want to work with your classmates on homework or while studying for an exam.
2. **Read the textbook**! Ideally, you should read the book before class, but most certainly, it must be read after class. Attending lectures is not enough to give you a complete idea of the material. The textbook is quite excellent, by the way!
3. To succeed in any math class you must **do the homework diligently**. Work on the homework while the material is fresh in your mind instead of waiting till the last minute. If you do not understand a problem, do not simply go to a friend or some website! Instead, sweat through the problem **on your own** first. If you do end up using help, understand the correct solution completely. Simply using your friends or websites for homework constitutes a wasted learning opportunity, and ultimately, your time, because you are here to learn! Taking shortcuts on homework will affect your confidence on quizzes and exams. Most importantly, there is a great joy in learning mathematics, especially Calculus – don't deny yourself that joy!
4. **Ask questions**! If you have a question or comment, just bring it up during class. Others benefit from your questions too, so never think of asking questions in class as a waste of anyone's time! There will be several others in the class who are probably stuck on that point at that moment and will be glad you asked about it.
5. **Review your notes** soon after class to identify any questions or comments about the lecture. Get such points cleared before the next class.
6. As you progress through this class, keep in mind that this is not a "learn and forget" class. You will be expected to know the material covered in this class later in this class, in Math 1D, 1D, 2A and 2B, as well as physics courses. Hence, **understanding** the material is extremely important.
7. Communicate with me in a **timely manner** regarding any relevant personal, administrative or academic issues. The quarter often passes by quite fast and it's hard to appropriately address issues, especially at the end of the quarter.

Math 1C (9:30 - 10:20 M-F) - Tentative Calendar - Fall 2018

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 **Sept**	Introductions Syllabus; 11.1 **24**	11.1 **25**	11.1, 11.2 **26**	11.2 **27**	**Quiz 1** Review/Catch-up **28**
Week 2 **Oct**	11.3 **1**	11.3 **2**	11.4 **3**	11.4 **4**	**Quiz 2** Review/Catch-up **5**
Week 3 **Oct**	11.5 **8**	11.5 **9**	11.6 **10**	11.6 **11**	**Quiz 3** Review/Catch-up **12**
Week 4 **Oct**	11.7 **15**	11.7 **16**	11.8 **17**	11.8 **18**	**Midterm Exam 1** **19**
Week 5 **Oct**	11.9 **22**	11.9 **23**	11.10 **24**	11.10 **25**	**Quiz 4** Review/Catch-up **26**
Week 6 **Oct-Nov**	11.11 **29**	11.11 **30**	10.1 **31**	10.2 **1**	**Quiz 5** Review/Catch-up **2**
Week 7 **Nov**	10.3 **5**	10.3 **6**	10.4 **7**	10.4 **8**	**Midterm Exam 2** **9**
Week 8 **Nov**	**HOLIDAY:** **Veterans Day** **12**	12.1 **13**	12.2 **14**	12.3 **15**	**Quiz 6** Review/Catch-up **16**
Week 9 **Nov**	12.4 **19**	12.5 **20**	**Quiz 7** **21**	**HOLIDAY:** **Thanksgiving** **22**	**HOLIDAY:** **Thanksgiving** **23**
Week 10 **Nov**	12.5 **26**	12.6 **27**	12.6 **28**	13.1 **29**	**Midterm Exam 3** **30**
Week 11 **Dec**	13.2 **3**	13.3 **4**	13.3 **5**	13.4 **6**	Review/Catch-up **7**
Finals Week **Dec**	**FINALS WEEK** **NO CLASS** **10**	**Final Exam** 9:15 - 11:15 **11**	**FINALS WEEK** **NO CLASS** **12**	**FINALS WEEK** **NO CLASS** **13**	**FINALS WEEK** **NO CLASS** **14**

Math 1C Homework Sets

Stewart Calculus (Early Transcendentals) 8th edition

Section	Problems	Points
11.1	8, 12, 18, 26, 32, 36, 42, 46, 48, 49, 51, 52, 56, 60, 66, 69, 71, 74, 77, 79, 80, 81, 83	5
11.2	4, 6, 7, 12, 15, 20, 23, 25, 28, 29, 32, 33, 37, 40, 44, 48, 61, 70, 76, 82, 86, 91	5
11.3	2, 3, 6, 8, 12, 14, 16, 19, 22, 24, 26, 28, 29, 30, 34, 36, 38	5
11.4	2, 4, 7, 8, 9, 12, 14, 16, 19, 21, 25, 27, 28, 30, 32, 34, 39,40, 43, 45, 46	5
11.5	4, 8, 10, 12, 13, 14, 16, 18, 21, 24, 27, 30, 33, 34	3
11.6	2, 4, 5, 7, 10, 12, 15, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 44, 51, 53	5
11.7	2, 4, 6, 8, 10, 12, 14, 16, 17, 18, 22, 24, 26, 32, 34, 36, 38	5
11.8	4, 8, 12, 16, 18, 20, 22, 24, 26, 28, 30, 31, 32, 37, 41, 42	5
11.9	2, 4, 8, 10, 11, 13, 16, 18, 20, 23, 26, 28, 32, 34, 37, 40, 41	5
11.10	2, 4, 6, 8, 9, 12, 13, 16, 17, 23, 26, 34, 36, 40, 41, 43, 48, 50, 58, 62, 64, 66, 68, 74, 80	5
11.11	3, 6, 9, 14, 16, 20, 25, 26, 28, 31, 35	3
10.1	7, 8, 14, 17, 22, 34, 38, 42, 46	2
10.2	2, 20, 32, 34, 42, 44, 45, 48, 52, 53	3
10.3	10, 14, 16, 18, 20, 22, 24, 26, 30, 32, 34, 38, 40, 46, 54, 56, 58, 62, 64, 65, 66, 68, 70	5
10.4	2, 7, 8, 10, 16, 18, 20, 22, 24, 30, 32, 34, 35, 36, 38, 40, 41, 44, 46, 48, 50, 52	5
12.1	3, 6, 8, 10, 11, 12, 14, 16, 18, 22, 24, 30, 32, 34, 36, 38, 40, 42, 45, 47, 48	3
12.2	4, 6, 8, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 35, 41, 42, 44, 36, 46	3
12.3	1, 6, 8, 10, 12, 16, 20, 21, 24, 25, 28, 32, 40, 42, 45, 47, 48, 50, 54, 56, 61, 62	3
12.4	2, 6, 9, 10, 13, 16, 18, 20, 22, 28, 30, 34, 35, 38, 41, 42, 43, 48, 49, 53	3
12.5	1, 4, 8, 12, 14, 17, 20, 24, 27, 30, 32, 36, 38, 46, 48, 52, 54, 58, 62, 65, 66, 68, 70, 71, 76	5
12.6	2, 3, 4, 6, 7, 8, 11, 12, 15, 16, 18, 21-33, 36, 43-47, 49, 52	3
13.1	1, 2, 4, 5, 7, 8, 10, 15, 16, 18, 20, 21-26, 28, 29, 31, 32, 41, 42, 44, 45, 49	3
13.2	1, 4, 7, 10, 11, 12, 15, 16, 18, 20, 22, 25, 34, 37, 38, 40, 48, 49, 56	3
13.3	2, 4, 7, 11, 13, 18, 19, 22, 23, 24, 28, 29, 31, 33, 38, 39, 43, 44, 48, 49, 55, 57, 61, 66	5
13.4	1, 2, 6, 8, 10, 11, 13, 15, 16, 19, 22, 23, 25, 28, 38, 39, 41	3
	Total	**100**

Student Learning Outcome(s):

*Graphically, analytically, numerically and verbally 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.