

**COURSE:** Math 1C-27 Calculus

**QUARTER:** Winter 2020

**DAY:** MW

**INSTRUCTOR:** Millia Ison

**TIME:** 4:00 - 6:15 pm

**OFFICE PHONE:** 864-5659

**EMAIL:** [isonmillia@fhda.edu](mailto:isonmillia@fhda.edu)

**OFFICE NUMBER:** S76e

**OFFICE HOUR :** MW: 3:00 – 3:50 p.

TuTh: 2:30 – 3:30 pm, answer questions through email online.

**COURSE PREREQUISITES:** Math 1B, or equivalent course with a grade "C" or better.

**TEXT:** Calculus: Early Transcendentals, by James Stewart, 8th edition.

**ENROLL WEB ASSIGN :** Class Key: **deanza 7876 6495**

**EQUIPMENT:** A computer or a computer with graph capability is required.

**GRADING:**

|                            |                                 |                                |
|----------------------------|---------------------------------|--------------------------------|
| WebAssign ----75 points    | A: 93% - 96 % , 558 - 600 pts   | C+: 76% - 79 % , 456 - 479 pts |
| 13 quizzes -----75 points  | A- : 90% - 92 % , 540 - 557 pts | C: 70 % - 75 % , 420 - 455 pts |
| 3 midterms --- 300 points  | B+: 87% - 89 % , 522 - 539 pts  | D: 60 % - 69 % , 360 - 419 pts |
| Final exam ---- 150 points | B: 83% - 86 % , 498 - 521 pts   | F: 0 % - 59 % , 0 - 359 pts    |
| Total ----- 600 points     | B-: 80% - 82 % , 480 - 497 pts  |                                |

**Homework Points:** You need to do your homework on a regular bases. However all homework is due on **Mar. 24, 11:59pm**. Total points on WebAssign is 1136(subject to change). Out of which, 1045 points are required (subject to change). If you have 1045, you earn 75 points (full credit) toward your grade. If you have total of 1100, then  $1120/1045 \approx 1.07$ , that is 107%,  $107\% \cdot 75 \approx 80$ , you have 80 points for homework, which is 5 points extra credit. The total amount of the extra credit will be decided after the final exam.

**Quiz Points:** 6 points each quiz, <sup>[SEP]</sup> 2 quizzes each week (1 quiz in an exam week). You must take quiz in class. **NO make-up quiz. Absent or taking a quiz outside of class is 0 for the quiz.** There are 16 quizzes this quarter. 13 quizzes are required. The extra quizzes either will be dropped (lowest scores) or will be extra credit. The total amount of the extra credit will be determined after the final exam.

**EXAM POINTS:** 100 points each. Dates are on the calendar the next page. Scheduled dates are subject to change. **NO make-up midterm exams.** Absences are counted as 0's. If the percent of your final exam score is higher than some of your exams, it will replace the lowest exam score. It can only replace 1 out of 3 exams. For example: your lowest exam score is 73%, your achieve 120/150 on the final exam, which is 80%. Then the 73 on the exam is replaced by 80. If all your 3 exams are higher than your final exam percentage, then your exam scores will not change. People doing better on the final will help their overall score.

**FINAL EXAM:** **Wednesday, March 25, 4:00 – 6:00 p**

Fail to take the final exam, you will receive “F” for your grade.

Exams and quizzes are to test your understanding of the classroom discussions and homework assignments. **Cheating of any form on quizzes, midterm exams or final exam will be grounds for disciplinary action.**

**IMPORTANT DATES:** Sunday, Jan. 19 --- Last day to drop without grade on your record.

Friday, Feb. 28 --- Last day to drop with a "W".

**ATTENDANCE:** Regular attendance is required. More than 3 absences without contact me will result in a “W” or “F” for the class. Last day to drop class is **Feb. 28**. After that day, You will receive a grade for the course.

| Chapter                                    | SEC                                | PROBLEMS  |      | Monday                        | Tuesday | Wednesday                           | Thursday | Friday                        |
|--|------------------------------------|---|------|-------------------------------|---------|-------------------------------------|----------|-------------------------------|
| Parametric Equations And Polar Coordinates | 10.1                               | Curves Defined by Parametric Equations          | Jan  | 6                             | 7       | 8                                   | 9        | 10                            |
|  | 10.2                               | Calculus with Parametric Curves                 | Wk1  | 10.1, 10.2                    |         | 10.2, 10.3<br>Q1                    |          |                               |
|  | 10.3                               | Polar Coordinates                               | Jan  | 13                            | 14      | 15                                  | 16       | 17                            |
|  | 10.4                               | Areas and Lengths in Polar Coordinates          | Wk2  | 10.3, 10.4<br>Q2              |         | 11.1, 11.2<br>Q3                    |          |                               |
| Infinite Sequences And Series              | 11.1                               | Sequences                                       | Jan  | 20                            | 21      | 22                                  | 23       | 24                            |
|  | 11.2                               | Series  | Wk3  | M L King Day<br>Holiday       |         | Exam 1                              |          |                               |
|  | 11.3                               | The Integral Test and Estimates of Sums         | Jan  | 27                            | 28      | 29                                  | 30       | 31                            |
|  | 11.4                               | The Comparison Tests                            | Wk4  | 11.2, 11.3<br>Q4              |         | 11.4, 11.5<br>Q5                    |          |                               |
|  | 11.5                               | Alternating Series                              | Feb  | 3                             | 4       | 5                                   | 6        | 7                             |
|  | 11.6                               | Absolute Convergence & the Ratio and Root Tests | Wk5  | 11.6, 11.7<br>Q6              |         | 11.8, 11.9<br>Q7                    |          |                               |
|  | 11.7                               | Strategy for Testing Series                     | Feb  | 10                            | 11      | 12                                  | 13       | 14                            |
|  | 11.8                               | Power Series                                    | Wk6  | 11.9, 11.10<br>Q8             |         | 11.10, 11.11,<br>Q9                 |          | Lincoln's Birthday<br>Holiday |
|  | 11.9                               | Representations of Functions as Power Series    | Feb  | 17                            | 18      | 19                                  | 20       | 21                            |
|  | 11.10                              | Taylor and MacLaurin Series                     | Wk7  | Washington's B-day<br>Holiday |         | Exam 2                              |          |                               |
| 11.11                                      | Applications of Taylor Polynomials | Feb   | 24   | 25                            | 26      | 27                                  | 28       |                               |
| Vector And The Geometry Of Space           | 12.1                               | Three-Dimensional Coordinate Systems            | Wk8  | 12.1, 12.2<br>Q10             |         | 12.3, 12.4<br>Q11                   |          | last day to drop w/W          |
|  | 12.2                               | Vectors   | Mar  | 2                             | 3       | 4                                   | 5        | 6                             |
|  | 12.3                               | The Dot Product                                 | Wk9  | 12.5<br>Q12                   |         | 12.6<br>Q13                         |          |                               |
|  | 12.4                               | The Cross Product                               | Mar  | 9                             | 10      | 11                                  | 12       | 13                            |
| Vector Functions                           | 12.5                               | Equations of Lines and Planes                   | Wk10 | Exam 3                        |         | 13.1, 13.2<br>Q14                   |          |                               |
|  | 12.6                               | Cylinders and Quadric Surfaces                  | Mar  | 16                            | 17      | 18                                  | 19       | 20                            |
|  | 13.1                               | Vector Functions                                | Wk11 | 13.3<br>Q15                   |         | 13.4<br>Q16                         |          |                               |
|  | 13.2                               | Arc Length and Curvature                        | Mar  | 23                            | 24      | 25                                  | 26       | 27                            |
|  | 13.3                               | Motion in Space: Velocity and Acceleration      | Wk12 |                               |         | <b>Final</b><br><b>4:00 – 6:00p</b> |          |                               |



**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.