| Math 12        | De Anza College, Cup  | pertino.                            | Quarter- Summer 2020 |  |  |
|----------------|---|-------------------------------------|----------------------|--|--|
| Course: Math - | D012. –03, Calculus for Business                              | Call # 13034                        |                      |  |  |
|                | Time: MTWTh, 3:00 to 5:15 p.m.                                | Room – Online                       |                      |  |  |
| Prerequisite:  | Mathematics 11, Finite Mathematics wit                        | h C or better grade.                |                      |  |  |
| Texts and      | (1) Calculus and its Applications. 11th Ec                    | lition. Authors: Bittinger, Ellenbo | gen, and Surgent     |  |  |
| Equipment:     | (2) Graphing Calculator. TI-83 plus/ TI-84 Calculator needed. |                                     |                      |  |  |
| Instructor:    | H. K. SHAH. Email: shahhemendra@ft                            | ıda.edu                             |                      |  |  |
| Office hours:  | TTh, 5:15 p.m. to 5:45 pm, online zoom                        | by appointment.                     |                      |  |  |

<u>Attendance:</u> Students are expected to attend all class meetings without tardy. Student with three absences may be dropped from the course. If student decides to drop the course, it is his/her responsibility to drop the course. 20 points are assigned for full attendance. Five points will be deducted for each absence.

<u>Course Outline:</u> I shall cover Chapters 1 to 4, and partially chapter 5. It covers differentiation and its applications; Exponential and logarithmic functions, and their derivatives; Integration and its applications. This is intensive and fast pacing course, needing lot of practice to have clear understanding of the concepts.

<u>Homework:</u> I will write list of exercises for practice. Do those exercises seriously, to perform better in the exams. I am not collecting your homework.

<u>Examinations:</u> There will be three midterm tests each of one hour, and three quizzes each of 20-25 minutes. There will be no make-ups for missed tests/final or quizzes. If student missed only one test due to unavoidable circumstance, and I am notified in advance or quickly; the final exam score % will be used to replace score of missed test, given that student <u>passed in final exam (scored at least 85/130)</u>. Students who attended all three Tests and <u>passed in final exam (scored at least 85/130)</u>. Students who attended all three Tests and <u>passed in final exam (scored at least 85/130)</u>. Students who attended all three Tests and <u>passed in final exam (scored at least 85/130)</u>, then lowest scored test will be replaced by the % of final exam, provided did better in final. A comprehensive final examination will be of two hours, during 3:00 to 5:00 p.m. on Thursday, August 06, 2020 in our classroom. Students absent in the final exam will get F grade. <u>All students need to save corrected returned papers of quizzes and midterm tests. I may need it in unusual situation</u>. Cell phone is not allowed in all exams.

<u>Disruptive behavior</u>: De Anza College will enforce all policies and procedures set forth in the *Standards of Students Conduct* (refer catalogue). Any student disrupting a class may be asked to leave the class. Further disciplinary action by administration will follow.

Academic Integrity: It is assumed that all students will pursue their studies with integrity and honesty; however, all students should know that incidents of academic dishonesty like cheating and plagiarism are taken very seriously. Students involved in cheating will be dropped and get F for the course. Further disciplinary action by administration will follow. <u>Grades:</u>

| Grade scale | Points range | Percentage range | Examination       | points     |
|-------------|--------------|------------------|-------------------|------------|
| A+ 4.0      | 476 to 500   | 95 + to 100 %    | Three Tests       | 3x80 = 240 |
| A 4.0       | 456 to 475   | 91 + to 95 %     | Three Quizzes     | 3x30 = 90  |
| A_3.7       | 436 to 455   | 87+ to 91 %      | Class attendance  | 20         |
| B+ 3.3      | 416 to 435   | 83+ to 87 %      | Final examination | 150        |
| B 3.0       | 396 to 415   | 79+ to 83 %      | Total points      | 500        |
| B_2.7       | 376 to 395   | 75+79 %          |                   |            |
| C+ 2.3      | 351 to 375   | 70+75 %          |                   |            |
| C 2.0       | 326 to 350   | 65+ to 70 %      |                   |            |
| D+ 1.3      | 306 to 325   | 61+ to 65 %      |                   |            |
| D 1.0       | 296 to 305   | 59+ to 61 %      |                   |            |
| D_0.7       | 276 to 295   | 55+ 59 %         |                   |            |
| F 0.0       | 0 to 275     | 0 to 55 %        |                   |            |

Math 12

De Anza College, Cupertino.

Quarter- Summer 2020

| Week #<br>Month | Monday                              | Tuesday                       | Wednesday                  | Thursday                                    | Friday | Saturday |
|-----------------|-------------------------------------|-------------------------------|----------------------------|---|--------|----------|
| 1<br>June       | 29<br>1.1, 1.2                      | 30<br>1.3, 1.4                | July 01<br>1.5 , Quiz-1    | 2<br>1.6, 1.7                               | 3      | 4        |
| 2 July          | 6<br>1.7, 1.8                       | 7<br>HW-3, Review<br>Test - 1 | 8<br>2.1, 2.2              | 9<br>2.3, 2.4                               | 10     | 11<br>·  |
| 3               | 13<br>2.4, 2.5                      | 14<br>HW- 4, Quiz-2<br>2.6    | 15<br>2.7, 2.8             | 6<br>HW-5<br>Review, Test - 2               | 17     | 18       |
| 4               | 20<br>3.1,3.2                       | 21<br>3.3, 3.4                | 22<br>HW-6, Quiz -3<br>3.5 | 23<br>4.1, 4.2                              | 24     | 25       |
| 5               | 27<br>4.3, 4.4                      | 28<br>4.5,4.6, HW-7           | 29<br>4.6, 5.1,            | 30<br>5.2,5.3                               | 31     | August 1 |
| 6               | 3<br>HW-8,9,<br>Review.<br>Test – 3 | 4<br>Whole review             | 5<br>Whole review          | 6<br>Final Examination<br>3:00 to 5:00 p.m. | 7      | 8        |

Text: Calculus and its Applications. 11<sup>th</sup> Edition. Authors: Bittinger, Ellenbogan and Surgent. Instructor: H. K. Shah

| #→   | 1          | 2          | 3           | 4          | 5           | 6          | 7          | 8 and 9     |
|------|------------|------------|-------------|------------|-------------|------------|------------|-------------|
| HW   | Chapter R, | 1.1 to 1.4 | 1.5 to 1.8  | 2.1 to 2.5 | 2.6,2.7,2.8 | 3.1 to 3.4 | 4.1 to 4.4 | 4.5, 4.6. & |
|      |            |            |             |            |             |            |            | 5.1 to 5.3  |
| Quiz | 1.1 to 1.4 | 2.1 to 2.5 | 3.1 to 3.4  |            |             |            |            |             |
| Test | chapter 1. | Chapters 2 | Chapters    |            |             |            |            |             |
|      | -          | _          | 3,4 and     |            |             |            |            |             |
|      |            |            | 5.1 to 5.3. |            |             |            |            |             |

All exams including final exam are show your work type exams. No multiple-choice exams.

## Student Learning Outcome(s):

\*Use correct notation and mathematical precision in the evaluation and interpretation of derivatives and integrals.

\*Evaluate, solve, interpret and communicate business and social science applications using appropriate differentiation and integration methodologies.