

Course: Math 12.01 Business Calculus **Instructor** Mr. Charles Klein
Day: M – F Summer 2017 **Office Phone** 408 864 8213
Time: 7:30–9:45 AM Room E–36 No office hours during summer

email: kleincharles@fhda.edu **website:** deanza.edu/faculty/kleincharles/

Text: Calculus & Its Applications, M. Bittinger et al.; 11th Ed. [the 10th Ed. could suffice as well]; a graphing calculator is recommended (TI–83/84/86 or equivalent).

Overview: Introduction to limits, differentiation and integration of single variable functions; differentiation of multivariate functions; applications: tangents, extrema, area, others; various business applications.

Student Learning Outcomes (What math from this course you should be able to do at the end of the quarter)

1. Use correct notation and mathematical precision in the evaluation and interpretation of derivatives and integrals.
2. Evaluate, solve, interpret, and communicate business and social science applications using appropriate differentiation and integration methodologies.

Pre-requisite: Math 11 or Math 41

The use of cell/portable phone, beeper, or pager in class is considered impolite and disruptive, if not rude. Please turn them off before entering class. If your phone/beeper goes off during a mini-test/exam, your paper will be taken, and you will not be allowed to continue working on it. Your score will be based on the work done up to that point.

S. O. P. 's: In addition to this course syllabus, the home page and the "**General Information**" page of the instructor's **website: faculty.deanza.edu/kleincharles/ is also considered part of the course syllabus**, and hence you are also bound by and responsible for the information contained therein.

Attendance: Since mathematics is cumulative in nature, attendance at all classes is expected. Students should be aware of appropriate drop dates (July 10, Aug. 2 – See special notes on Dropping a Class in the General Information page of the instructor's website). *It is the student's complete responsibility to drop this class as I will not drop anyone from the class* (see syllabus last page or webpage for procedure, if necessary). You are expected to attend all classes. Please inform me by email if you drop the class.

Homework: Homework assignments represent the student's opportunity to learn what was taught, by practicing both mechanical skills and problem-solving techniques. The student is expected to do –and is responsible for– all problems associated with the sections of the text covered each class meeting.

Mini-Test: Mini-Tests will be given intermittently throughout the quarter (typically in the middle of a chapter). Short (a day) notice, if any, will be given, and a missed Mini-Test (~ 30 pts. but will vary) cannot be made up. Mini-Tests will be worth a total of approximately 150 points.

Exams: Each exam will be announced about a few days in advance. Students are required to take exams when scheduled, including the final. There are no makeup's of any kind; the final exam will count twice; one lowest exam score will be dropped. For example, if one of the midterm exams is the lowest, then the final score will replace that midterm score. (i.e., exam scores of 50, 60, and 70, and a final exam score of 65 will give you exam points of 60, 65, 65, 70 - which means you just gained 15 free points (average goes up). However, with exam scores of 50, 60, and 70, and a final exam score of 40 will give you scores of 40, 50, 60, 70, and thus your overall average will be pulled down.

- *If your lowest exam score is the result of cheating or cell phone mis-use, that score will not be dropped, but the next lowest will.*
- If you need to leave the room during a mini-test or exam, your paper is turned in and you are done.
- At the end of the minitest/exam, you will have **ten seconds** to turn in your paper. If it is turned in late, a late penalty (see below) will be assessed. It is not fair for you to continue working while others are turning in their work.

All work on quizzes and exams must be neat, complete, and logically presented; where work is required, partial credit will be given provided the work justifies such credit: a correct answer by itself will not earn full credit (except on a multiple choice question).

Points will be assessed/deducted not only for the correctness of the mathematics, but also for the presentation of the math. Check the "General Information" page of the instructor's website for further information/details, etc. **THE PRESENTATION OF YOUR MATH IS AS IMPORTANT AS THE ACCURACY OF YOUR MATH.**

A penalty of a minimum of 10 % off, up to no credit, will be assessed for any mini-test, exam or other assigned work that is turned in late.

Extra Credit: There is typically an additional extra-credit problem/question on each exam and quiz. "XC" problems are also offered "in addition to" rather than "in place of" regular class-work, and are provided at the instructor's discretion; these are generally due the next class. There is no makeup for any missed extra credit. Extra credit is not available to make up for poor quiz/test performance.

Some exams, including the final, in whole or in part, may be multiple choice. The day and time for the final is already set; consult the DAC schedule of classes. Do not ask to take the final early.

Cheating, which includes, but is not limited to: looking at another's paper, copying, passing notes or other information, etc., will not be tolerated. The first instance will result in a zero on a mini-test or exam, and the student referred to the Dean for academic discipline. It is possible that as a result of cheating, the student could receive a grade of F for the course.

Homework Problems: Expect problems to be given each day. There are no points given for homework, nor is homework collected. Remember, you should be prepared to spend 2-3 (maybe even more) hours per day (including weekends) for review, homework, and study. (see General Information on instructor's website)

These problems basically cover the variety of skills you will need. It is suggested you do additional problems of each type to gain additional expertise.

It is strongly suggested you get the names and email/phone numbers of several students in the class so that you may contact others for any missed assignments or XC, should you be absent.

It is highly recommended that you form study groups with others in the class. Take the initiative to form that group: the purpose of the group is NOT to share answers/copy from one another; but to help EXPLAIN the material/how to do the problem. The best way to learn something is to try to explain it to someone else.

**Take advantage of the video tutorials that are accessible via the instructor's website.
(see left-hand column on home page of website)**

Homework Problems:

Treat Chapter R as a review chapter; you should be very familiar with its content; you are responsible for knowing key information in this chapter, even though we will not be going over it.

For each section, the homework assignment is every other odd problem (E.O.O.) 1, 5, 9, 13... end. This means that you will be doing about one-fourth of the total problems in that section; so if there are 100 problems, you will be doing about 25 problems. Assuming about 5 mins per problem, that is 125 minutes, a good two hours. Use another hour for review, study, etc., and you can become quite competent in this course.

Exam Schedule:

| <u>Exam #</u> | <u>Covering</u> | <u>On or about</u> |
|---------------|-------------------|--------------------------|
| 1 | Ch. 1 8 (# sec's) | July 12 |
| 2 | Ch. 2 7 | July 19 |
| 3 | Ch. 3 6 | July 26 |
| 4 | Ch. 4 7 | Aug. 2 |
| 5 | Ch. 5 7 | Aug. 9 |
| Final | Comprehensive | Last Day of Class |

Grades: Your grade will be based upon the percentage of total points earned, as compared to the total points possible, according to the following:

| <u>From</u> | <u>Points</u> | <u>Percentage Earned *</u> | <u>Grade</u> |
|-----------------------|---------------|----------------------------|--------------|
| Mini-Tests | 180 | 88 – above | A |
| Exams | 500 | 78 – 87 | B |
| Final | 100 | 68– 77 | C |
| <hr/> | <hr/> | | |
| Total Points Possible | 780 | 55 – 67 | D |
| | | 54 or below | F |

* (i.e., from all minitests & exams you have 554 out of 780 points —> 71 % = C)