Math 1D, section 21Z **Calculus 4** **Winter 2022**

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Classes: Classes will be held, 1:30 pm – 3:45pm, on Mondays and Wednesdays, on Zoom. While you are encouraged to attend these synchronously to have the opportunity to speak and participate during class, this is not required, and recordings of lectures will be made available.

WebAssign: WebAssign is required for this class. Assignments will count 20 points towards your grade.

Text: Calculus: Early Transcendental, 8th edition, by James Stewart, published by Thomson Brooks/Cole, 2016. An electronic version of this text is included with WebAssign.

Calculator: A scientific calculator with trigonometric and exponential functions or a graphing calculator is recommended for this class. While they can be used for study and homework, calculators such as the TI-95 that do symbolic calculation are not allowed for exams. Some exams may not allow a calculator at all.

Canvas Assignments: There will be some short homework assignments that will be collected on Canvas. These will count 20 points towards your grade.

Midterm Exams: There will be three midterm exams for this course. Midterms will be held asynchronously online. Each midterm exam will count 20 points towards your grade.

Final Exam: The final exam will be given on Tuesday, March 22. It will count 40 points towards your grade.

Either your lowest midterm grade or half of your final exam grade will automatically be dropped; whichever helps your grade the most. This includes midterm exams that are missed due to illness or other unavoidable reasons.

Pandemic Issues: You need to submit proof of vaccination or file for an exemption, or you will be dropped from the course. You will need to use Optimum HQ whenever you come to campus and wear a mask. Detailed instructions for this are given at https://www.deanza.edu/return-to-campus/students.html

Grade: The final grade is determined by the weighted average of quizzes, midterms, and finals as described above.

- A 92% - 100%
- A- 90% - 91%

- B+ 86% - 89%
- B 83% - 85%
- B- 80% -82%
- C+ 70% - 79%
- C 60% -69%
- D 40% - 59%
- F 0% - 39%

An F will also be given in the case one gets a 0 on the final exam.

Honors: If you are taking the honors version of this class, you will be expected to do extra work, either proposing and carrying out an independent project, or viewing supplemental lecture material and doing extra problems I assign. Failure to do this work will result in lowering the grade for the course by one level (for example from A to A-, or A- to B+).

Policy on dropping: I am required to drop students who do not attend any of the first two weeks of classes. After that, if you decide you no longer wish to take this class it is your responsibility to go online and formally drop the class by the appropriate deadline. If you fail to do so, I will be unable to drop you at a later date.

Policy on Academic Integrity: If a student is found to have cheated on an exam, they will receive a 0 for that exam. They will not be able to drop that score from their average as they normally might when computing the final grade

Academic Help: Mathematics is a challenging subject which takes time and effort to master. Of course, students differ in their backgrounds, but in general you should expect to do a minimum of 10 hours of work per week reading the book, doing homework, and thinking about the material. This is in addition to the time you spend in class. If you find you are having difficulty with the material, it is important to address the situation immediately, as it's easy to fall behind. The tutorial center is available online for brief questions, as well as one on one sessions with a designated tutor. In addition, I encourage all students to come to my office hours listed above. Often, I'm able to help students talking with them individually in a way that's not possible in a large lecture class.

Student Learning Outcome(s):

*Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.
*Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.
*Synthesize the key concepts of differential, integral and multivariate calculus.