

Fall 2026
CALCULUS III; MATH 283-1010; 4 CREDITS
Prerequisite: MATH 182

Instructor: E. Salehi; PhD in mathematics from the University of Washington (1985)
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Text Book: Essential Calculus by James Stewart (Chapters 10-13)

TOPICS TO BE DISCUSSED: Vectors, quadratic surfaces, vector-valued functions, functions of several variables, double and triple integrals, vector Calculus, line integrals, Green's Theorem, surface integrals, and Stokes's Theorem.

HOMEWORK: Homework and due dates have already been assigned. Students should go to the web site <http://www.webassign.net/>, click on the student tab, then choose "I have the class key". The class key will be given to you on the first day of class. Enter the class key and follow the instruction and create an account for yourself (if you do not have one).

TEST AND GRADING POLICY: There will be eight quizzes, three tests and a comprehensive final. Students are not allowed to use graphing calculators.

Homework assignments graded by WebAssign	100 points
8 Quizzes each one has 13 points	104 points
First test on Thursday September 24, 2026	100 points
Second test on Friday October 23, 2026	100 points
Third test on Friday November 20, 2026	100 points
Final exam on Tuesday December 8, 2026 (at 10:10 am)	200 points
Total possible points	704

90% and higher receives A- and A.
80% - 90% receives B- , B, and B+.
70% - 80% receives C- , C, and C+.
60% - 70% receives D- , D, and D+.
Below 60% of total will receive F.

LEARNING OUTCOMES: Upon successful completion of this course, students should be able to:

- ▶ Handle vectors fluently in solving problems involving the geometry of lines, curves, planes, and surfaces in space.
- ▶ Visualize and draw graphs of simple surfaces in space.
- ▶ Differentiate and integrate scalar and vector-valued functions.
- ▶ Understand the basic integration and differentiation theory for functions of several variables.
- ▶ Perform calculations relating to double and triple integrals in Cartesian, polar, cylindrical and spherical coordinate systems.
- ▶ Calculate extreme values using Lagrange multipliers.
- ▶ Perform basic calculations relating to line and surface integrals and apply the theorems of Green and Stokes.
- ▶ Translate real-life situations into the symbolism of mathematics and find solutions for the resulting models.

IMPORTANT:

1. During the tests and quizzes, graphing calculators are not allowed and all the phones should be off the tables.
2. No late homework will be accepted. No make up quiz or test will be given.
3. Final date to drop or withdraw from classes, or change from credit to audit is Friday October 30, 2026, no drop will be allowed after this date.
4. If you have a documented disability that may require assistance, you will need to contact Disability Resource Center (DRC) for coordination in your academic accommodations. DRC is located in the Campus Resource Center, room 136. The phone is 702-895-0866.
5. The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex, #22 on the current UNLV map. Students may learn more about tutoring services by calling (702) 895-3177 or visiting the tutoring web site at: <http://academicsuccess.unlv.edu/tutoring/>.
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See the Student Academic Misconduct Policy (approved December 9, 2005) located at: <http://studentconduct.unlv.edu/misconduct/policy.html>.
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