SUMMER 2017
CALCULUS III; MAT 283-1; 4 CREDITS
Prerequisite: MAT 182

Instructor: E. Salehi; Ph D. in mathematics from the University of Washington (1985)
Office: CDC 926 Phone: 895-0390
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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 four tests, during which students are not allowed to use graphing calculators.

Homework assignments are in Webassign
First test on Monday June 12, 2017 100 points
Second test on Wednesday June 21, 2017 100 points
Third test on Thursday June 29, 2017 100 points
Forth test on Friday July 7, 2017 100 points

Total possible points 500

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 surfaces in space.
- Differentiate and integrate scalar functions of vectors.
- 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 coordinates.
- 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, graphing calculators are not allowed.

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 June 23, 2017, no drop will be allowed after this date.

4. Learning Enhancement Services (LES) houses Disability Services, Tutoring Services, and Learning Strategies. If you have a documented disability that may require assistance, you will need to contact Disability Services for coordination in your academic accommodations. LES is located in the Reynolds Student Services Complex (SSC), Room 137. The phone is 895-0866, or 895-0652.

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/.

6. Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV’s function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: http://studentconduct.unlv.edu/misconduct/policy.html.

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