

Math 4A Intermediate Calculus 5 units

Section 74964 MTTh 3:35-5:15 pm Lynbrook Rm 403

Prerequisite: Math 3B or equivalent with a C or better

Text: Tan, Multivariable Calculus, 1st Ed. plus WebAssign [class key = westvalley 6240 1581]

Scope and Content: Students will demonstrate knowledge of vectors and vector fields in two and three dimensions, multivariate functions and their partial derivatives, quadric surfaces, double and triple integrals, Green's, Stokes', and the Divergence Theorem, and applications to optimization, volume, surface area, mass, and center of mass problems. The course is taught by the lecture-discussion method.

Student

Learning Outcomes Find limits of, differentiate, and integrate vector-valued functions.

Find limits of, differentiate, and integrate functions of several variables.

Instructor: Steve Blasberg Office: Lyn 403 E-mail: steve.blasberg@wvm.edu

Office Hours: MTTh 5:15-5:30 pm

Emergencies: In case of an emergency (earthquake, fire, hazardous material spill, etc), stay in your seats and wait for directions from the instructor, who will order evacuation if necessary and lead you to the nearest emergency assembly area for further instructions. Do not leave the group until dismissed.

Disability Statement: West Valley College makes reasonable accommodations for persons with documented disabilities. Students should notify the Disability and Educational Support Program (DESP) at 741-2010 of any special needs and/or discuss their needs with the instructor.

Attendance: A student missing more than four class meetings may be dropped; however, it is the student's responsibility to ensure that all drop procedures have been properly carried out.

Cheating: Cheating of any kind, such as plagiarism, copying, allowing copying, or use of unauthorized notes will be punished. Penalties range from a warning to loss of credit on the problem to loss of credit on the examination.

Homework: Assignments are made daily and collected after each chapter. Each chapter's homework is worth a total of ten points. The best four scores count toward the final grade. No late homework is accepted.

Quizzes: There are ten quizzes worth ten points each. The best eight scores count toward the final grade. There are no makeups.

Tests: There are five hour-long tests worth 40 points each, one test per chapter. There are no makeups, but the final exam percentage may be used to substitute for one low or missed test score.

Final Exam: A comprehensive two-hour final examination worth 80 points will be given Monday, December 10, 2018 at 3:35 pm.

Grading: The final grade is based on the number of points earned from the following:

Homework	40 points
Quizzes	80
Tests	200
<u>Final Exam</u>	<u>80</u>
Total	400 points

A scale of A = 360-400, B = 320-355, C = 280-315, D = 240-275 points is used.

Course Outline:

<u>Chapter</u>	<u>Title</u>	<u>Sections</u>	<u>Time</u>
10	Vectors and the Geometry of Space	10.1-10.7	2.5 wks
11	Vector-Valued Functions	11.1-11.5	2 wks
12	Functions of Several Variables	12.1-12.9	3 wks
13	Multiple Integrals	13.1-13.8	3 wks
14	Vector Analysis	14.1-14.9	3.5 wks