

MAT 460 Vector Calculus

SPRING 2017*

***Important Note:** All items on this syllabus are subject to change.
Any in-class announcement, verbal or written, is considered
official addendum to this syllabus.

Course: MAT 460, Vector Calculus

Time: 9 – 10:15 am, TTh

Location: CDN 62

Line #: 27994

Instructor: Dr. Sergei Suslov

Office: PSA 621

Phone: 965-8987

E-mail: sks@asu.edu

Office Hours: TBA

Text: Vector Calculus, 5th edition, by Jerrold E. Marsden and Antony J. Tromba, W. H. Freeman and Company, New York, 2009 (required); Applications of Tensor Analysis, by A. J. McConnell, Dover Publications, Inc., New York, 1957 (if there is time, recommended).

Prerequisite: MAT 242 (or 342 or 343), 272, 274 (or 275)

Exams: There will be two regular in class exams (2*150);
homework and quizzes (100);
and a comprehensive final exam (200)

Grading Policy:

A-, A, A+ = 90 - 100%

B-, B, B+ = 80 - 89%

C, C+ = 70 - 79%

D = 60 - 69%

E = 0 - 59%

Material to be covered: Except for a few sections, chapters 1-8 will be covered

Make-up policy: No make-up exams will be given without notification.

Also, no late homework will be accepted for grading.

Course Description

The main purpose of this course is to explore basic methods of differential and integral Vector Calculus a subject that is very important in the education of student majoring in mathematics, science or engineering.

The topics include: Vectors, curvilinear coordinates, Jacobians, implicit function theorem, line and surface integrals, Green's, Stokes', and divergence theorems. Not open to students with credit in MAT 372. Prerequisites: MAT 242 (or 342 or 343), 272, 274 (or 275).

More information can be found on the past course website:

<http://hahn.la.asu.edu/~suslov/classes/mat460s10/mat460s10.htm>