

Vector calculus supplement: UIUC MATH 292

Many IAI M1 900-3 (Calculus III) courses that were equivalent to the former UIUC Math 242, Calculus of Several Variables, do not cover all of the vector calculus topics which are part of the newer UIUC course, Math 241, Calculus III. These courses will not fulfill any Calculus III requirement which may be part of a student's major at the University of Illinois.

We have created a new course, MATH 292, Vector Calculus Supplement. It reviews some multivariable calculus and then covers all of the vector calculus topics that students need to have a background equivalent to Math 241. **The Math 241 requirement will be fulfilled by adding MATH 292 to any course which formerly transferred as UIUC Math 242.**

MATH 292 is a 2 credit hour course, with catalog description:

Course in multivariable calculus. Topics include gradient, divergence, and curl; line and surface integrals; and the theorems of Green, Stokes, and Gauss. Intended for transfer students whose multivariable calculus course did not include the integral theorems of vector calculus. Credit is not given for both [MATH 292](#) and [MATH 241](#). Prerequisite: Consent of instructor.

MATH 292 is an online course combining an electronic textbook with the Mathematica computer software system.

Students have two options for taking MATH 292:

- (a) NetMath (correspondence) course over the summer. Register at <http://netmath.uiuc.edu/register.php> by July 1 and complete the course by August 8 to be ready to take more advanced math courses in Fall 2008. This option is also available later in the year for students who do not need a follow-up math course immediately. The charge for NetMath courses is separate from regular tuition. Students may register for this course now.
- (b) Regular-semester course in Fall 2008. Students may enroll for MATH 292 as part of their fall schedules. The course will still run as an independent study online course, but the 2 hours count towards full-time student status and are included in tuition as a regular semester course. This version will not be available in spring or summer semesters.

For either option, students MUST contact

Ms. Alison Champion, abc@uiuc.edu, phone 217-333-9199,

with their name, transfer institution, and transfer Calculus III course in order to obtain approval to register for MATH 292 at the University of Illinois.