

Course: Math 252		Calculus with Analytic Geometry III	Course # 4352
Credits: 2 high school credits, 4 college credits		Commitment: one semester paired with Math 151	Grade: 12
A-G Category: meets "C" requirement		Estimated Homework Time:	
Level of Difficulty:		Moderate	Difficult Very Difficult
Prerequisite: Successful completion of Math 151 (C or higher)			

Course Description:

This course includes the algebra and geometry of 2 and 3 dimensional Euclidean vectors, the algebra and calculus of multivariable functions including composition of functions, limits, continuity, partial differentiation, gradients, higher order derivatives, the chain rule, constrained and unconstrained optimization including Lagrange's theorem, multiple integrals, integrals over paths and surfaces, and integral theorems of vector analysis. This course is intended as a general introduction to the theory and applications of multivariable calculus. This course is essential for most upper division courses in mathematics and forms part of the foundation for engineering and physics. The course is intended for the students interested and/or planning to major in mathematics, physics, astronomy, engineering, computer science, physical chemistry, operational research, or economics. CSU/UC Transferable.

Attendance and citizenship will be considered when determining placement in college classes.

Recommended Skills:

See Miramar course catalog.

Syllabus link: Request syllabus from professor.