

Department: Mathematics

Course No: MATH 245Q

Title: Advanced Calculus III

Credits: 4

Contact: Andy Haas

WQ: Q

Catalog Copy: MATH 245Q. Advanced Calculus III. Both semesters. 4 credits each semester. May be taken for honors credit but open to any qualified student. Open to sophomores or higher. Prerequisite: Math 244 or consent of instructor. MATH 245 may be used in place of MATH 210 or 230 to fulfill any requirement satisfied by MATH 210 or 230. MATH 246 may be used in place of MATH 211 or 221 to fulfill any requirement satisfied by MATH 211 or 221. A rigorous treatment of more advanced topics, including vector spaces and their application to multivariable calculus and first-order, second-order and systems of differential equations.

Q Criteria : The Department of Mathematics is replacing the honors sequence 120-121-220 by two sequences of honors calculus courses, of which this is one. The reason for this change is that the department is creating an honors program in mathematics for highly talented mathematics students seeking a rigorous program providing superior preparation for advanced work. This program will begin with Math 243-244-245-246. Academic Merit : These courses will engage students and instructors in a deep and thorough study of various aspects of calculus and differential equations and the underlying theory.

Role of Grad Students: N/A