Department: Mathematics

Course No: 2142

Title: Advanced Calculus II

Credits: 4

Contact: Andy Haas

WQ: Q

Catalog Copy: MATH 2142Q [244Q]. Advanced Calculus II. Both semesters. 4 credits each semester. May be taken for honors credit but open to any qualified student. Open to sophomores or higher. Prerequisite: A year of calculus (that may include calculus taken in high school) or consent of instructor. MATH 243 may be used in place of MATH 115 or 135 to fulfill any requirement satisfied by MATH 115 or 135. MATH 244 may be used in place of MATH 116 or 136 to fulfill any requirement satisfied by MATH 116 or 136.

A rigorous treatment of the mathematics underlying the main results of one-variable calculus. Intended for students with strong interest and ability in mathematics who are already familiar with the computational aspects of basic calculus.

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