**Department:** Mathematics

Course No: MATH 116Q

Title: Calculus II

Credits: 4

**Contact**: David Gross

**WQ**: Q

Catalog Copy: Either semester. Four credits. Four class periods. Prerequisite: MATH 113 or 115 or 120, or advanced placement credit for calculus (a score of 4 or 5 on the Calculus AB exam or a score of 3 on the Calculus BC exam). Recommended preparation: A grade of C- or better in MATH 113 and 115. Not open to students who have passed MATH 121. Substitutes for MATH 114 or 121 as a requirement. Transcendental functions, formal integration, polar coordinates, infinite sequences and series, vector algebra and geometry, with applications to the physical sciences and engineering.

O Criteria: The course include mathematics at or above the basic algebra level as an integral part of the course which is used throughout the course. The course included the use of basic algebraic concepts such as: formulas and functions, linear and quadratic equations and their graphs, systems of equations, polynomials, fractional expressions, exponents, powers and roots, problem solving and word problems. The course require the student to understand and carry out actual mathematical manipulations and use them in order to draw conclusions

**Role of Grad Students**: Qualified graduate assistants may teach individual sections under supervision of a faculty coordinator.