

Department: Mathematics

Course No: MATH 114Q

Title: Introductory Calculus 3

Credits: 4

Contact: David Gross

WQ: Q

Catalog Copy: 114Q. Introductory Calculus 3. Either semester. Four credits. Four class periods. Prerequisite: MATH 113. Recommended preparation: grade of C- or better in MATH 113. Note: MATH 115 is not adequate preparation for MATH 114. Not open for credit to students who have passed MATH 116 or 121. The transcendental functions, formal integration, polar coordinates, infinite sequences and series, lines and planes in three dimensions, vector algebra.

Course Information:

a: The course goal is to continue and complete the freshman year 3 course sequence started by Math 112Q and 113Q.

b: The course format will remain unchanged from the current course. There are exams, weekly projects, a gateway proficiency exam, quizzes and a final exam. The reading assignments will continue from the same textbook used in Math 112 and Math 113.

c: The transcendental functions, formal integration, polar coordinates, infinite sequences and series, lines and planes in three dimensions, vector algebra.

Q Criteria : The course includes mathematics at or above the basic algebra level as an integral part of the course which is used throughout the course. The course includes 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 requires the student to understand and carry out actual mathematical manipulations and use them in order to draw conclusions

Role of Grad Students: During the "on" semester, graduate assistants will be teaching the discussion sections only. During the "off" semester, graduate teaching assistants might teach a section, but under the supervision of a faculty member. During the summer, a graduate assistant might be teaching a section by him or herself.