

Department: Mathematics

Course No: MATH 115Q

Title: Calculus I

Credits: 4

Contact: David Gross

WQ: Q

Catalog Copy: 115Q Calculus I. Either semester. Four credits. Four class periods. Prerequisite: Passing score on the Calculus Readiness Test. Students cannot receive credit for MATH 115 and either MATH 112, 113, or 120. Suitable for students with some prior calculus experience. May be used in place of MATH 112 or 120 to fulfill any requirement satisfied by MATH 112 or 120. Limits, continuity, differentiation, antidifferentiation, definite integrals, with applications to the physical and engineering sciences. Sections with V credit integrate computer-laboratory activity.

Course Information:

- a: The goals of the course are the same: to give students the a standard first semester course in freshman calculus.
- b: The format will remain unchanged and is dependent on the instructor. It will typically have a few exams, quizzes, projects or worksheets, homework and a final exam.
- c: Topics are: Limits, continuity, differentiation, antidifferentiation, definite integrals, with applications to the physical and engineering sciences.

Q 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: While most sections of this course are taught by faculty (regular, visiting and post-doctoral), some sections are taught by well qualified graduate teaching assistants under the supervision of a faculty course coordinator.