Department: Mathematics

Course No: MATH 211Q

Title: Elementary Differential Equations

Credits: 3

Contact: David Gross

WQ: Q

Catalog Copy: 211Q. Elementary Differential Equations. Either semester. Three credits. Prerequisite: MATH 116 or 121. Recommended preparation: A grade of C- or better in MATH 116; and MATH 210 or 220. Not open for credit to students who have passed MATH 221. Open to sophomores or higher. Introduction to ordinary differential equations and their applications, linear differential equations, systems of first order linear equations, numerical methods.

Course Information:
a: The goal is to give a qualitive introduction to the study of differential equations.
b: The course format will be the same as it is currently and will depend on the instructor. This will include but not be limited to midsemester exams and a final exam.
c: Introduction to ordinary differential equations and their applications, linear differential equations, systems of first order linear equations, numerical methods.

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: The course is mostly taught by faculty (regular, visiting and post-doctural) and sometimes by well-qualified senior graduate student assistants. The GAs that teach this course do so with minimal faculty supervision.