Department: Mathematics

Course No: MATH 221Q

Title: Enhanced Differential Equations

Credits: 3

Contact: David Gross

WQ: Q

Catalog Copy: 221. Enhanced Differential Equations. Either semester. Three credits. Prerequisite: MATH 121 or consent of the instructor. Open to sophomores or higher. Not open to students who have passed MATH 211. MATH 221 satisfies any requirement met by MATH 211, and provides superior preparation for prospective mathematics, science, and engineering majors. The subject matter of MATH 211 in greater depth, with emphasis on the underlying mathematical concepts.

Course Information:
a: The goal of the course is to give the equivalent course as Math 211Q to students, but with greater depth for those students demanding such a course.
b: The course format is determined by the instructor, but typically includes one or two mid semester exams, a final exam, projects (group and individual), and other graded and nongraded assignments.
c: The topics are the same as those in Math 211Q, but offered in greater depth.

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: Graduate teaching assistants do not play a role in the teaching of this course.