DEPARTMENT: MATHEMATICS
NAME OF COURSE: DIFFERENTIAL EQUATIONS
GENERAL DESCRIPTION:

(Prerequisite: AP Calculus BC) This is a semester course which provides an in-depth study of first-order differential equations, systems of differential equations, and higher-order equations. Students will learn to use numerical techniques, slope fields, phase planes, and nullclines to extract information about models. Students will learn techniques for solving equations, integrating factors, methods of undetermined coefficients, variation of parameters, eigenvalues, and Laplace transforms.

TEXTBOOK: Elementary Differential Equations
Pearson Prentice Hall

REQUIREMENTS:

Students are expected to maintain a set of well-organized notes in a mathematics notebook, complete daily homework assignments, and read selections from texts as assigned. Regular attendance is expected, and students are to make up work missed due to absences. Students should seek extra help during the school day in the mathematics study center or after school with the teacher when necessary. Appropriate behavior, respect for self and others, and participation in classroom activities are expected.

GRADING PROCEDURES:

The grade for each of the four marking periods is determined by unit exams, quizzes, and timely completion of homework assignments. A departmental midyear exam comprises one-fifth of the second quarter grade. The student's final average will be determined by averaging the four quarter grades and the Final grade equally.