Integrated Math 3 Overview

COURSE TITLE: Integrated Math 3

DEPARTMENT: Mathematics

UNITS: Two Semesters: 5 Units per Semester

GRADE LEVEL: 10th, 11th, 12th

NATURE OF COURSE: Meets district graduation requirement as one of three courses in mathematics.

Meets UC/CSU approval for the a-g requirement in mathematics.

Requires a grade of C- or better for placement into Statistics or Pre-Calculus.

Requires a grade of B- or better for placement into AP Statistics.

PREREQUISITE: A grade of C- or better in Integrated Math 2

DESCRIPTION: The purpose of Mathematics 3 is to formalize and extend the mathematics that

students learned in Mathematics 1 and 2. The critical areas deepen and extend understanding of exponential relationships, by contrasting them with inverse functions (logarithms). The geometric relationships of trigonometry are further explored as representing trigonometric functions on a graph. Mathematics 3 uses properties of individual functions to extend to compositions of and transformations of functions, while also formalizing statistical analysis of data. The course reaches its conclusion with multiple part applications and extensions in longer lesson tasks. Classes focus on a student centered approach where students work in partners and groups in order to discover, discuss, and analyze mathematical concepts. There is also a software component to the class, called MATHia, where students work through problems and get help at their own pace.

COURSE GOALS: Key skills and concepts, as outlined by the California Common Core Standards, are

addressed as students learn to:

* Analyze polynomial and rational functions using different representations
* Interpret functions that arise in applications in terms of the context
* Represent and solve inverse, transformed, and composite functions
* Understand exponential equations as an inverse to logarithms
* Utilize trigonometric functions to understand periodic phenomena
* Understand visual displays and summary statistics
* Collect data and form realistic conclusions

TEXTBOOK: *Integrated Math 3* Carnegie Learning, 2012

GRADES: A = 90% - 100% 55% Tests/Quizzes 55% Tests/Quizzes B = 80% - 89% 25% Daily Work/Projects 25% Daily Work/Projects

C = 70% - 79% 10% MATHia Online 10% MATHia Online

D = 60% - 69% 10% Midterm\_\_\_\_\_\_\_\_\_\_ 10% Final\_\_\_\_\_\_\_\_\_\_\_\_\_\_

F = 0% - 59% 100% SEMESTER 1 GRADE 100% SEMESTER 2 GRADE