## Troy High School Course Profile

Course Title: Pre-Calculus

Course Prerequisites: Refer To Registration Presentation

## **Course Description:**

Pre-Calculus is designed to prepare a student for college-level calculus. Topics include polynomial and rational functions and their graphs, exponential and logarithmic functions and their graphs, trigonometric functions and their graphs, the fundamental identities, proving identities, solving trig equations inverse trigonometric functions and equations, polar equations, triangle trigonometry, vectors, systems of equations and inequalities, matrices, sequences and series.

Students entering this course should already have a mastery of the following concepts and possess the following skills:

- Excellent in factoring
- Simplifying complex fractions
- Be able to solve all first and second degree equations
- Have a solid grasp of function notation (camp)
- Know how to rationalize the denominator
- Problem solving skills
- Ability to think conceptually; not just repeat a process (camp)

Workload Expectations for this course (list typical amount of homework, projects, presentations, papers, etc.):

- Daily homework will take 45 75 minutes, depending on the student's ability and nature of the assignment.
- Unit tests and quizzes
- Semester finals