I propose that College Algebra and Trigonometry be added to our course catalog at the High School.

Purpose of the course:

- Students could not only earn a HS math credit, but would also be eligible to earn 3 college math credits.
- To replace the Pre-Trigonometry course currently offered.

Data:

1 student enrolled in Pre-Trigonometry during the 2012-2013 school year went on to complete the Algebra 2 Trigonometry course in 2013-2014.

3 students enrolled in the Pre-Trigonometry during the 2013-2014 school year went on to complete the Algebra 2 Trigonometry course in 2014-2015.

Currently there are Zero Students enrolled in the Algebra 2 course whom were in Pre-Trigonometry last school year, and only 10 students enrolled in Pre-Trigonometry this school year.

In my opinion the Pre-Trigonometry course is no longer serving its purpose of helping students to move onto and be successful in the Algebra 2 Course.

Requirements:
Every student whom enrolls in College Algebra must pass an entrance exam. This exam is free of charge, and can be taken twice. The course has a required Text.

CAYUGA COMMUNITY COLLEGE
Division of Natural and Health Sciences, Mathematics and Technology

College Algebra and Trigonometry - Math 104
3 Credits

CATALOG DESCRIPTION

A continuation of the study of Intermediate Algebra, this course introduces the fundamentals of trigonometry. The basic properties of the complex number system are first reviewed. The concept of function is then introduced and applied to algebraic, rational, exponential, logarithmic and trigonometric functions. Applications of trigonometry to right and oblique triangles and vectors are emphasized. Assistance from the Academic Support Center via tutors, filmstrips, audio and video taped lessons and computer assisted instruction is available for the topics in this course. A SCIENTIFIC CALCULATOR IS REQUIRED (or using the Micro-computer Lab). Three class hours weekly. Pre-requisite: Math 102 or equivalent. (See Math Flowchart) (Every Academic Year)

COURSE OBJECTIVES

- *To develop mathematics skills which may be utilized in other college courses.*
- *To develop mathematical skills necessary to enter subsequent mathematics courses.*
- *To develop problem solving skills which may be applied in other courses and everyday life.*
- *To meet mathematics department objectives*

COURSE REQUIREMENTS

In order to achieve course objectives the student should

1. *Maintain high quality attendance in class.*
2. *Read assigned sections in the textbook.*
3. *Complete all assigned homework in a timely manner.*
4. *Complete all required tests, quizzes or other evaluation instruments.*

COURSE MATERIALS

This course requires the use of a full function scientific calculator.

TEXT: Algebra and Trigonometry, Sixth Edition by Larson/Hostetler. Houghton Mifflin

IV. *Exponential and Logarithmic Functions*
- *a. Exponential Functions and Their Graphs*
- *b. Logarithmic Functions and Their Graphs*
- *c. Properties of Logarithms*
- *d. Exponential and Logarithmic Equations*
- *e. Exponential and Logarithmic Models*

V. *Trigonometry*
- *a. Angles and Their Measures*
- *b. Right Triangle Trigonometry*
- *c. Trigonometric Functions of Any Angle*
- *d. Graph of Sine and Cosine Functions*
- *e. Graph of Other Trigonometric Functions*
- *f. Inverse Trigonometric Functions*
- *g. Applications and Models*

Revised 01/2004/D. Fama/sb