College Algebra
New Course Proposal

The math department of Campus High School, Unified School District 261 is proposing a new math class of College Algebra for the high school. The need for this course is decided by looking at the goals of our students going to college and the classes available to them.

College Algebra is a class designed to equip both calculus and non-calculus bound students with a basic knowledge of how to apply the classical functions of College Algebra to real life problems. This would provide college bound students an opportunity to achieve math college credit prior to graduation from high school. Many of our students who are currently in Trigonometry and AP Statistics will choose careers that require a maximum math level of College Algebra for graduation. This course would provide them that opportunity without having to take a higher level of math unnecessarily. Based on the numbers currently in Trigonometry and AP Statistics, it is estimated that between 75 and 100 students would be interested in taking this class for college credit.

College Algebra is a course that is being offered in many schools in the state. Most are supported by their local colleges. In Sumner County they are supported by Cowley College. Sedgwick County is supported by Wichita State University. Concurrent enrollment with Wichita State University will be available. If a concurrent enrolled student earned a C or higher, they would earn three credit hours from Wichita State University. To meet Wichita State University's requirements the final for the course would have to be worth 30% of the grade for all participants in the class.

Since this course would mainly draw students from other classes, we do not see a need for additional staff at this time. It would require approximately 100 College Algebra books. Although this is mainly a lecture type class, the students should have a graphing calculator to support the graphing concepts in the class. We would recommend that students provide their own calculators, but the school may need to provide a limited number (estimated at 10%) for those who cannot afford one.

Since this course applies concepts of Algebra it would meet many of the state reading standards.
1) R.HS.1.3.1 Determines meanings of words or phrases using context clues.
2) R.HS.1.3.3 Determines meaning of words through structural analysis.
3) R.HS.1.4.2 Understands the purpose of text features.
4) R.HS.1.4.5 Uses information from the text to make inferences and draw conclusions.
5) R.HS.1.4.9 Uses paraphrasing and organizational skills to summarize information.
It would also meet many of the state common core math standards. The general standards that would be met are the following.
1) High School The Real Number System
2) High School Algebra
3) High School Functions
4) High School Modeling

The requirements to enroll in this class.
1) 21 on the ACT
2) Students will sign up for college credit with WSU
3) Pass Algebra II with a C
4) 3.0 overall GPA at Campus

Needs for this class:
Initial startup: 100 College Algebra books @ $163.40 each, total $16340
College Algebra, Beecher, 4th Edition 2012
ISBN: 9780321693990

10 TI-84 calculators @ $110 each, total $1100
Additional costs: The cost of replacing books will be offset by the reduction in need for Trigonometry and AP Statistic books.