

The Issue:

Students who started in Algebra I and Geometry who want the distinguished diploma have no options besides the Calculus track in advanced mathematics. Many of these students are not planning on going into a field where calculus is necessary. And by forcing these students to be in a course they do not desire to be in but need for the diploma they want we are giving them a bad taste towards all higher math as well as hurting the education for those in the course who are interested in the calculus track.

Currently we have 12 periods of Pre-Algebra and Intervention, neither of which are we allowed to offer a high school math credit for. With two teachers required to teach those 12 sections there is little room for alternate advanced math courses besides the calculus track. We have explored other options such as dual credit and correspondence courses through Montana Digital Academy but even they only offer a one semester course in statistics.

While there is a need to spend a considerable effort on the students who struggle we also need to be offering options for those students who come in at grade level and want a distinguished diploma. It is not reasonable to essentially force students to take a course (Calculus) that few professions need in order to get a distinguished diploma.

Proposed Option 1:

Allow students to exchange their fourth math credit for a computer science course. This would keep them in a STEM course while exposing them to a rapidly growing sector of not only the technology field but many others fields as well.

Proposed Option 2:

Currently students need four years of math and three years of science. We could allow them to take an additional science for their fourth year of math while still requiring them to make it through Algebra II. There are 9 science courses and much more freedom of what you can take once you have taken ?Biology? This would also keep those students take the same amount of courses under the STEM umbrella

Proposed Option 3:

A combination of option 2 and 3 where we allow students to take either an additional science course or a computer science course in place of their fourth year of mathematics.

Summary:

We still will be requiring all of our students seeking a distinguished diploma to make it through Algebra II but we would be opening up their options once they have made it to that point. It is our hope that we will be able to reduce the amount of math courses offered which are not at the high school level as well as gain another teacher in the math department so we can offer alternative advanced mathematics paths to Calculus. Even so allowing students to explore other options inside of the STEM umbrella to finish out their distinguished diploma should be allowed for those students who are currently in this situation as well as those in the future. It is our feeling that these changes are not lowering the bar for those seeking the distinguished diploma but widening the hoop they have to jump through.