

## Curriculum Recommendation for Precalculus

**Overview:** After careful consideration of our district's goals and the needs of our students, I recommend adopting the **Precalculus – First Edition – Miller, Gerken**. This curriculum aligns with our objectives and enhances the educational framework we've established with Algebra 1, Geometry, and Algebra 2.

**1. Alignment with District Goals:** The Precalculus Curriculum is designed to help all students acquire the necessary skills, knowledge, and attitudes for lifelong success. It emphasizes critical thinking, problem-solving, and real-world applications, ensuring students are not only prepared for further mathematical study but also equipped with skills relevant in everyday life and various career paths.

**2. Continuity with Current Curriculum:** This curriculum builds directly on our existing framework. It seamlessly integrates concepts from the Reveal Curriculum of Algebra 1, Geometry, and Algebra 2, allowing for a coherent progression of skills. The curriculum reinforces foundational knowledge while introducing advanced topics, ensuring students are adequately prepared for calculus and beyond. The curriculum is written with high school students in mind and uses language that is understandable at the high school level. Other curriculums are written at a college level and may be more difficult to understand.

**3. Comprehensive Online Resources:** The Precalculus Curriculum through McGraw-Hill offers a vast and robust online suite of resources. The mathematics department has multiple years of experience working with McGraw-Hill's online resources, so it would be easier to incorporate into our classroom and prep routines.

It includes:

- **Practice Worksheets:** Varied exercises to reinforce concepts and encourage mastery.
- **Extra Practice:** Additional materials for students who need more support or wish to challenge themselves.
- **Editable Exams:** Customizable exams that allow teachers to tailor assessments to meet specific classroom needs.
- **Online videos and supplemental resources:** Database of videos created to each of the topics in the curriculum. Integrates with our current online platform of Google Classroom.

Note, these resources are editable Word documents that allows us to easily adapt to the levels of our students in the classroom.

These resources ensure that both teachers and students have the necessary tools to succeed. It also provides the resources to easily develop reteaching material for students who did not grasp the concept the first time.

**4. Update to Current Curriculum:** This recommendation serves as an update to our current precalculus curriculum. The Precalculus Curriculum incorporates modern pedagogical approaches and technological advancements that enhance student engagement and

understanding. Its innovative structure and content are designed to meet the needs of today's learners while preparing them for future challenges in mathematics and related fields. The rigor is well within our students' abilities, and should not be daunting and unnecessarily challenging.

**Conclusion:** In summary, adopting the Precalculus Curriculum aligns with our district goals, maintains continuity with our existing curriculum, provides extensive online resources, and represents a significant upgrade to our current offerings. Implementing this curriculum will empower our students to thrive academically and develop essential skills for their futures.

Thank you for considering this recommendation for a new precalculus curriculum. We believe that with the **Precalculus – First Edition – Miller, Gerken**, we can significantly enhance our students' learning experiences and outcomes and extend the learning that has been established from Algebra 1, Geometry, and Algebra 2.

## Other Curriculum for Precalculus Considered

**Overview:** After careful consideration of our district's goals and the needs of our students, we do not recommend adopting the following:

**A) Precalculus – 7<sup>th</sup> edition – Blitzer,**

**B) Precalculus (College Algebra and Trigonometry) – 7 edition – Lial, Hornsby.**

While each of these curriculums align with our objectives and enhances the educational framework we've established with Algebra 1, Geometry, and Algebra 2, we believe that recommended curriculum meets the needs of our students better.

A) Limited homework and assessment set editing. All custom assessments are completed through an online platform that allows you to pick problems, but doesn't allow for the customization and variation to create multiple assessments quickly.

B) Used at FVCC in the past. Good curriculum, very rigorous and demanding, but beyond what we are expecting for our high school level students. Limited resources available through the curriculum.

Either of these would be a good fit at Bigfork High School, however, the recommended curriculum of **Precalculus – First Edition – Miller, Gerken** aligns with the work that has been established with the Reveal Algebra 1, Geometry, and Algebra 2 courses and builds on those essential standards and provides more customizable content that we can adjust to our students' needs.