

Calculus Syllabus

Teacher

Ms.Chloe Hennon
chloe.hennon@biloxischools.net

Course Overview

Calculus is a branch of mathematics that involves the study of rates of change. Topics include functions, limits and continuity, derivatives, and integrals. The course will focus on applying the skills and concepts of calculus to modeling and solving problems across multiple representations.

Course Expectations

Although this course is not a college level course, the pace and outline will be very similar without the added pressure of the AP Exam at the end.

Students are expected to complete all homework problems to the best of their ability. If they need additional support, they can refer to the additional resources listed below.

Students will take regular assessments. These are short and are intended to check for understanding of concepts and skills that were recently taught. Students are required to make all corrections when the assessments are returned to them.

All projects are due by the indicated due date.

Technology

Students will be provided with a TI-84CE Plus graphing calculator during class. Some problems throughout the course will require them to use their graphing calculators.

Textbook

Demana, Waits, Kennedy, Bressoud, Boardman. *Calculus: Graphical, Numerical, Algebraic*. 4th Edition. Pearson/Prentice Hall.

Additional Resources

- Students will receive a printed copy of a year long Calculus Curriculum.
- Students will have access to videos posted to Google Classroom for support
- Students can log in to Khan Academy for videos and practice on topics
- Students have the option to come to tutoring Tuesday and Thursdays after school

Required Materials

- 3 in Binder
- Loose leaf Paper
- Expo marker
- Pencil

Calculus Syllabus

Course Outline and Pacing

Term 1: Limits, Continuity, Differentiation

Term 2: Differentiation, Contextual Applications of Differentiation, Analytical Applications of Differentiation

Term 3: Integration and Accumulation of Change, Differential Equations, Applications of Integrations-Average Value, Position, Velocity, Acceleration, and Area

Term 4: Applications of Integration-Volume, AP Review

Student Practice

Throughout each unit, Topic Questions will be provided to help students check their understanding. The Topic Questions are especially useful for confirming understanding of difficult or foundational topics before moving on to new content or skills that build upon prior topics. Topic Questions can be assigned before, during, or after a lesson, and as in-class work or homework. Students will get rationales for each Topic Question that will help them understand why an answer is correct or incorrect, and their results will reveal misunderstandings to help them target the content and skills needed for additional practice. At the end of each unit or at key points within a unit, the students will be assessed for understanding and mastery of key concepts.

Reteach-Retest Policy:

Students may Retest on a test once they have shown evidence of learning the missed material through corrections and extra practice.

Grading:

Students need to give their very best effort at all times. Grades are awarded based on effort and understanding. I **DO NOT** give extra credit. Powerschool will be updated each unit.

Each Unit will consist of AT LEAST 3 grades.

- Homework
- Quiz or Activity
- Test

Make-up Work

Students are expected to take responsibility for their make-up work. Upon return, students are to check the Google Classroom for assignments that they missed. Handouts, notes, and paper assignments will be found in the absent folder for their class period and are expected to be retrieved at the beginning of class when they return.