

Overton High School  
**2024-2025 Precalculus Syllabus**

Teacher: Mrs. Kimberly West

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Students and Parents/Guardians:

Welcome to or back to Overton High School for the 2024-2025 school year! I am looking forward to a year of fun and learning. Parents, please feel free to contact me regarding any concerns or questions regarding your child in my class. You can reach me by email. I will do my best to respond as quickly as possible.

Students/Parents please review this syllabus together. This syllabus contains essential information that will be helpful this school year.

**Course Description:**

Precalculus is designed to prepare students for Calculus, either in high school or college. Topics include understanding algebraic and polynomial functions, exponential and logarithmic functions, and analytic geometry. Students will also study applications of trigonometry, trigonometric identities and equations, mathematical induction, and the concept of limits. In addition to content mastery, the course goals are to further develop students' problem solving and critical thinking skills. The difficulty level of the material increases significantly throughout the semester. Students should be prepared to be challenged and to work hard. Students are encouraged to form study groups with peers, practicing beyond daily assignments to master skills. Technology will be incorporated throughout the curriculum.

**Course Outline:**

**Prerequisites Unit:** Real Numbers, Cartesian Coordinate System, Linear Equations and Inequalities, Lines in the Plane, Solving Equations Graphically, Numerically, and Algebraically, Complex Numbers, and Solving Inequalities Algebraically and Graphically

**Unit P:** Prerequisites

**Unit 1:** Functions and Graphs

**Unit 2:** Polynomial, Power, and Rational Functions

**Unit 3:** Exponential, Logistic, and Logarithmic Functions

**Unit 4:** Trigonometric Functions

**Unit 5:** Analytic Trigonometry

**Unit 6:** Applications of Trigonometry

**Unit 7:** Systems and Matrices

**Unit 8:** Analytic Geometry in Two and Three Dimensions

**Unit 9:** Discrete Mathematics

**Unit 10:** Statistics and Probability

**Unit 11:** An Introduction to Calculus: Limits, Derivatives, and Integrals

**Textbook:** Precalculus: Graphical, Numerical, Algebraic Tenth Edition

**Supplementary Instructional Materials:** [e-Textbook](#), Textbook power-points and Khan Academy Site

**Grading Policy:** A student's overall grade in this course represents how well the student can demonstrate mastery of content on formative and summative assignments and assessments given throughout the year. The grade for each marking period will be determined based on the following percentages according to school policy:

**40% Assessments**

**35% Classwork**

**10% Homework**

**5% Class Participation**

**10% Projects**

**Redo/Retake:** Students may redo/retake some assignments at teacher's discretion.

**Make-up assignments due to absences:** Students will be given a time limit on make-up assignments. To prevent receiving a zero on missed work, students are expected to adhere to given time limit to make up missed assignments.

**Classroom Expectations:**

1. Be responsible for your own learning
2. Be on time, Be prepared and Be ready to participate
3. Seek additional help immediately if a topic seems difficult or requires alternative approaches to assist in your understanding

**TUTORING:** Tutoring is provided on Thursdays from 2:30 to 3:30 in my classroom, room 228. Tutoring will be cancelled if no student is present by 2:45.