

Prerequisite: Successful completion of Algebra II

Description: Precalculus is a course designed for students who have successfully completed the Algebra II. This course is considered to be a prerequisite for success in calculus and college mathematics. Algebraic, graphical, numerical, and verbal analyses are incorporated during investigations of the Precalculus content standards. Parametric equations, polar relations, vector operations, conic sections, and limits are introduced. Content for this course also includes an expanded study of polynomial and rational functions, trigonometric functions, and logarithmic and exponential functions. Application-based problem solving is an integral part of the course. Instruction should include appropriate use of technology to facilitate continued development of students' higher-order thinking skills.

Homework/Classwork: Homework will be assigned daily and is due on the following day of class, unless otherwise stated by teacher. If homework is not turned in at the assigned time, a grade of 0 will be given. Classwork consists primarily of problem of the day, group assignments, textbook assignments, and worksheets completed in class.

Quizzes: All quizzes, including vocabulary will be given on an as needed basis, and maybe announced or unannounced. These quizzes will be used to assess previous lesson for which homework has been assigned, completed, and/or reviewed.

Chapter Test/ Exams: A comprehensive test to measure students' mastery of skills and concepts will be given at the end of each chapter and/or nine weeks. Students will be informed of the scheduled test date at least a week in advance. A variety of test formats may be used. A make-up test will be given only if the student's absence the day of the scheduled test is excused. Absences the day before the test date do not excuse a student from taking the test as scheduled.

Missed Assignments: Students will be permitted to make up missed assignments only if their absence from class is excused. An excused absence does not mean the student is excused from completing the assignment, only that the assignment can be made up. The student will be given three days to make-up any missed assignments unless other arrangements have been made with the teacher. **Students must take the initiative to determine what assignments have been missed and schedule a time after school to take missed tests or quizzes. Students will not be allowed to make up quizzes or tests missed due to an unexcused absence. Students will not be allowed to makeup quizzes or tests during class time.**

Progress Reports/ Report Cards: All students will be issued a progress report at 5 weeks and a report card at 10 weeks.

Personal Materials/Supplies Needed Daily:

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|--------------------------|---|---------|-------------------------|
| 1.) Textbook | 4.) Loose Leaf Paper | Pencils | 7.) Color Pencils |
| 2.) Graph Paper | 5.) 1 Dry Erase Marker | | 8.) Graphing Calculator |
| 3.) Binder with Dividers | 6.) 1 Subject Note book/Composition book/or Folder with fasteners | | |

Classroom Rules

⇒ **Always obey the Student Code of Conduct approved and provided by the Birmingham Board of Education.**

- ⇒ **Always be on time and prepared for class.**
 - ⇒ **Do all assignments and turn every assignment in on time.**
 - ⇒ **Always ask a question if you do not understand what is being asked of you.**
 - ⇒ **Respect others and their property. Treat others and their property as you would want to be treated.**
 - ⇒ **Use a pencil to complete all assignments.**
 - ⇒ **Wait to be recognized before speaking and always get permission before leaving seat.**
 - ⇒ **Keep the area around you clean at all times.**
 - ⇒ **Leave all food items (candy, gum, chips, drink) in your locker.**
 - ⇒ **Leave your book bags in your locker.**
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AGREEMENT

Student

I have read and understand the syllabus and what is expected of me in Mrs. Whatley-Barnes Precalculus Class. If I have any questions I will not hesitate to ask.

Student's Signature

Teacher

I will teach PreCalculus and try my best to make sure every student understands the concepts taught. I will be supportive and will make myself available to the student as well as the parent by way of phone or conference for any questions or concerns that may arise.

_____/231-7030
Teacher's Signature

Parent

As your child's PreCalculus teacher, I am willing to take the proper steps to ensure your child is working to his/her full potential. In order to do so, there needs to be a strong communication network. First, please feel free to call (231-7030) or schedule a conference with me during the school day regarding your child's performance in class through the counselor's office. In addition, please check below all the following for which you would like to be contacted and a number you can be reached during **8:15 a.m. and 9:45 a.m.**

Please check all that apply.

- | | |
|---|---|
| ___ When my child improves on homework. | ___ When my child improves on quizzes. |
| ___ When my child performs poorly on a test. | ___ When my child improves on tests. |
| ___ When my child misses an assignment | ___ When my child is absent from class. |
| ___ When my child shows behavior problems | |
| ___ When my child's average drops below a ____. | |

I have read and understand the syllabus and what is expected of my child in Mrs. Whatley-Barnes PreCalculus class. I will be supportive to both my child and Mrs. Whatley-Barnes. If I need to be reached by Mrs. Whatley-Barnes, she may contact me at the number and time listed below.

Parent/Guardian's Name (Please Print) _____

Parent's Signature

Number _____	Best time to call this number _____
Number _____	Best time to call this number _____

Precalculus Syllabus

Section 1.1 – Rectangular Coordinates
Section 1.2 – Introduction to Graphing Equations
Section 1.3 – Symmetry; Graphing Key Equation: Circles
Section 1.4 – Solving Equation
Section 1.5 – Solving Inequalities
Section 1.6 – Lines
Chapter 1 Test

Section 2.1 – Functions
Section 2.3 – Properties of Functions
Basic Graphs & Transformations
Section 2.4 – Piecewise-defined Functions
Section 2.5 Graphing Techniques
Section 2.6 – Operations on Functions
Chapter 2 Test

Section 3.4 – Rational Functions I
Sections 3.5 – Rational Functions II
Section 4.1 – One-to-One Functions: Inverse Functions
Section 4.2 – Exponential Functions
Section 4.3 – Logarithmic Functions
Section 4.4 – Properties of Logarithms
Section 4.5 – Logarithmic and Exponential Equations
Section 4.6 – Compound Interest
Section 4.7 – Growth and Decay
Section 4.8 – Exponential, Logarithmic, and Logistic Models
Section 2.2 – Linear Functions and Models
Section 3.1 – Quadratic Functions and Models
Chapter 4 Test

Section 5.1 – Angles and their Measures
Section 5.2 – Trigonometric Functions
Section 5.3 – Properties of Trigonometric Functions
Graph Basic Trigonometric Functions
Section 5.4 – Graphs of the Sine and Cosine Functions
Section 5.5 – Graphs of the Tangent, Cotangent, Cosecant, and Secant Functions
Section 5.6 – Phase Shift
Chapter 5 Test/9 Weeks Exam