Chickasaw High School
Mrs. Kristin Kendrick
2019-2020 Course Syllabus
PreCalculus

Course Overview:

Precalculus is a course designed for students who have successfully completed the Algebra II With Trigonometry course. 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, and limits are introduced. Content for this course also includes an expanded study of polynomial and rational functions, conic sections, 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.

Students will:

I. NUMBER AND QUANTITY
- A. The Complex Number System
  1. Represent complex numbers and their operations on the complex plane.
- B. Limits
  1. Understand limits of functions.
- C. Vector and Matrix Quantities
  1. Represent and model with vector quantities.
  2. Perform operations on vectors
  3. Perform operations on matrices and use matrices in applications

II. ALGEBRA
- A. Seeing Structure in Expressions
  1. Write expressions in equivalent forms to solve problems.
- B. Arithmetic With Polynomials and Rational Expressions
  1. Use polynomial identities to solve problems
- C. Reasoning With Equations and Inequalities
  1. Solve systems of equations.
- D. Conic Sections
  1. Understand the graphs and equations of conic sections.

III. FUNCTIONS
- A. Interpreting Functions
  1. Interpret functions that arise in applications in terms of the context.
  2. Analyze functions using different representations.
- B. Building Functions
  1. Build a function that models a relationship between two quantities.
- C. Trigonometric Functions
  1. Recognize attributes of trigonometric functions and solve problems involving trigonometry.
  2. Extend the domain of trigonometric functions using the unit circle.
  3. Model periodic phenomena with trigonometric functions
  4. Prove and apply trigonometric identities.

IV. GEOMETRY
- A. Similarity, Right Triangles, and Trigonometry
  1. Apply trigonometry to general triangles.
- B. Expressing Geometric
  1. Properties With Equations Translate between the geometric description and the equation for a conic section.
  2. Explain volume formulas and use them to solve problems.

V. STATISTICS AND PROBABILITY
- A. Interpreting Categorical and Quantitative Data
  1. Summarize, represent, and interpret data on a single count or measurement variable.
  2. Interpret linear models.
- B. Making Inferences and Justifying Conclusions
  1. Understand and evaluate random processes underlying statistical experiments.
  2. Make inferences and justify conclusions from sample surveys, experiments, and observational studies.
- C. Using Probability to Make Decisions
  1. Calculate expected values and use them to solve problems.
  2. Use probability to evaluate outcomes of decisions.

Materials:

Pencils
Binder (Can be shared with other classes)
Notebook Paper
Graph Paper

Grading Determination / Scale:

60% Summative- Test, Unit Assessment, Major Projects
40% Formative- Quizzes/Classwork
100% Class Grade

Classroom Guidelines for Success:

1. Be Prepared
2. Be Respectful
3. Have Integrity
4. Be Determined
5. Strive for Excellence

Classroom Policies:

1. Treat yourself, others, and school properties with respect.
2. Be prompt and prepared.
3. Follow directions and listen attentively.
4. Practice self-control.
5. Use academic and appropriate language.
6. Read instructions/directions before asking questions.
7. Return materials as you found them.
8. Personal Electronic Devices will not be used while in the classroom. (NO CELL PHONES)

In order to be respectful of your teacher, your fellow classmates, and yourself, several things must happen:
Take yourself seriously: Follow directions, ask questions when you have them, come to class prepared, seek help when you need it, and **give your best effort**. This will undoubtedly lead to your success in our class.
Allow others to learn: Remember that you are not the only one here to learn. When using school property, think about the other students that need to use the equipment for their education. Our school and classroom is a safe learning community where everyone deserves the opportunity to learn.
Use academic language: In class and at school, we are a community of student scholars. When we are at home, sometimes we use a different language. When we are with our friends, sometimes we use a different language. When we are in our learning community, we use **academic or scholarly language**. When we are asking questions or disagreeing with a fellow classmate, we use specific respectful language. Most communication will occur using technology, we will use academic language. The chat feature will be used for collaboration on group projects, not socialization.
Academic Honesty: Students must not cheat (take information from a fellow student) or plagiarize (steal information from printed or sound sources without giving credit to the sources). These infractions are serious and will result in a zero for any assignment in which cheating is discovered and may result in disciplinary action. The assignment CANNOT be made up if cheating has occurred.

Parents, communication via email is the best way to get a quick response to any questions that you may have.

Mrs. Kendrick kkendrick@chickasawschools.com

After reading all sections of the Course Syllabus with your parent(s), please initial where indicated and sign below and return to class. This counts as a class participation grade.

_____ _____ _____
Parent or Guardian Signature Student Signature Date

Parent/Guardian Information:

Parent/Guardian(s): _____

Best Way to Contact: Call Text Email Written Communication

Contact Information: Phone _____ Alternernate Number _____

Email Address: _____

Comments/Concerns: _____

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What do I need to know about your student? _____

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