PRECALCULUS/TRIGONOMETRY COURSE SYLLABUS

COURSE: Precalculus/Trigonometry

INSTRUCTOR: Ms. Jessie Fowls jessie.fowls@saints.org

TEXTBOOKS: Advanced Mathematical Concepts: Precalculus with Applications

Glencoe/McGraw-Hill, 2006.

REQUIRED

SUPPLIES: Lined Paper, Graph Paper, Pencils, Erasers, Protractor, Ruler, Colored

Pencils

REQUIRED

CALCULATOR: TI-83 (plus) or TI-84 (plus) is required. This calculator will be used

extensively in this course and in future math courses.

PREREQUISITE: A grade of B or higher in Algebra 2 and teacher recommendation

COURSE PURPOSE

This course is designed to increase the students' knowledge of mathematics beyond Algebra 2. It provides the background needed to succeed in calculus. This course emphasizes the fundamentals of functions through the study of polynomial, rational, power, exponential, logarithmic, and trigonometric functions. Students thoroughly explore composition, inverses, and transformations of functions.

COURSE DESCRIPTION

A. Course Outcomes

This course is designed to help students:

- 1. Review functions, relations and inequalities.
- 2. Solve systems of equations by substitution, by elimination, and graphically.
- 3. Sketch, analyze, and solve the graphs of quadratic and polynomial functions.
- 4. Solve and graph quadratic functions, power functions, polynomial functions, and rational functions.
- 5. Understand and perform operations with complex numbers, rational functions, and polynomial functions.
- 6. Identify a unit circle and its relationship to real numbers and evaluate trigonometric functions of any angle.
- 7. Use the Law of Sines and Law of Cosines and solve for the area of a triangle.
- 8. Use sum and difference formulas, product and sum formulas, multi-angle formulas, power reducing formulas, and half-angle formulas to rewrite and evaluate trigonometric functions.
- 9. Convert, graph, test, and use polar coordinates and vectors.
- 10. Demonstrate knowledge of exponential and logarithmic functions.
- 11. Use sequences, and series to solve real life problems.

Textbook Website: www.amc.glencoe.com

Online Student Edition Access Code: D3DA6C1537

GRADE DESCRIPTION

Semester grades are cumulative and will be calculated as follows:

Tests & Projects	60%
Daily Assignments, Quizzes	25%
Semester Exam	15%

ADDITIONAL INFORMATION

All homework and notes must be done in **pencil** on loose-leaf paper or in a spiral notebook (*turned in without spiral confetti*). The scoring for daily assignments will be on a 10 point scale and will be graded in class, checked for completion, or graded by me. The grades given for the majority of the assignments will be as follows:

Incorrect	Points Awarded (out of 10)
0-1	10
2-3	9
4-6	8
7-9	7
10+	Redo/correct for credit

Late work will be accepted up to two class periods after the original due date. The student will have the opportunity to earn 80% after one late reminder. After the second reminder, the student is still responsible for turning in the completed assignment but will earn a 0%.

Class Expectations

- 1. Encourage LEARNING.
- 2. RESPECT yourself, adults, and your classmates.
- 3. Be RESPONSIBLE.
- 4. Be ACCOUNTABLE.

The Obvious requirements for success

- 1. Cheating is absolutely not acceptable and will guarantee a zero on the assignment or test along with a trip to the office for administrative consequences.
- 2. Be on time and be prepared.
- 3. Complete assignments neatly and on time.
- 4. Don't wait to ask for help I'm here to help you succeed.

Consequences for negative behavior include

- 1. Behavioral reminder, loss of privilege, and/or work detail.
- 2. Sent out of class & student/teacher conference.
- 3. Parent notification.
- 4. Sent to the office.

Attendance & Tardiness

Absences will affect your performance in this class **more than anything else**. It is your responsibility to make up any work you missed. You will have up to the number of class days you were gone to make up your work for full credit for excused absences. If you participate in sports or other school related events that cause you to be absent from class, your homework must be turned in **before** you leave school.

Tardiness: I expect all students to be in class and seated when the bell rings. If you need to visit your locker after class has started, you will be marked tardy. Excessive tardiness will result in a student-teacher conference and parent notification.

School Policies

Students are subject to all academic policies of the school as printed in the Student Handbook. Furthermore, it is each student's responsibility to read and follow all academic policies of the school.

- * Students are expected to come prepared to class with all their necessary, required supplies. If a student does not come prepared, this will be noted and may affect his/her grade.
- ★ Cell phone usage in my class is not allowed, unless I give permission. All devices, including ipods and earbuds, are not to be seen, heard, or 'felt' during class. If I spot a device in use, it will be mine for the remainder of the class and potentially the day. This is especially important to note when tempted to use your cell phone's calculator. That is not allowed.
- * All backpacks are to be placed completely under your seat/desk, up against the wall, or somewhere else, entirely out of the aisles.
- ★ Feel free to contact me via email throughout the year. However, I will only respond to student emails that are written properly and respectfully. Emails should include at the very least, the following components: Salutation, capitalization where necessary, proper use of English, and a closing.

Sign and return to Ms. Fowls	
Student Name:	Precal/Trig
We have read and discussed the class details an	ed expectations. We agree that they will be followed and supported.
Student Signature	Parent/Guardian Signature
 Date	 Date