

PRE-CALCULUS:

Course Description:

This course develops the topics essential for success in Calculus. Content includes a study of algebraic, transcendental, and trigonometric functions, as well as their compositions and inverses, vectors, polar graphing, complex numbers, conic sections, and sequences and series. Students who complete this course successfully will have a strong background for a first-year Calculus sequence.

Hyperlink to State Standards:

https://www.tn.gov/assets/entities/education/attachments/std_math_precalculus.pdf

INSTRUCTION:

Topics:

1. Algebraic Functions and Graphs
2. Polynomial and Rational Functions
3. Exponential and Logarithmic Functions
4. Trigonometric Functions
5. Analytic Trigonometry
6. Applications of Trigonometric Functions
7. Polar Coordinates
8. Sequences and Series

General Pacing:

Module pacing will depend on content and mastery. Each module will be completed in 1-3 weeks, which includes two days for review and assessment.

Materials Needed:

Students will need a three ring one-inch binder, paper, pencil, and a TI-83 Plus or TI-84 Plus calculator.

There will be a set of calculators available for in-class use only. Therefore, a student is *not* required to purchase his or her own calculator.

Fees:

There is no fee for this course.

Resources

- School-Based: Textbook - Sullivan: *Pre-calculus Enhanced with Graphing Utilities* and supplemental materials
- Outside: Discovery Education videos, Illuminations Lessons (<http://illuminations.nctm.org/>), <http://robertkaplinsky.com/lessons/> , Knox County suggested sites, and other math websites.

- As a guardian of your student, if you do not approve of a specific resource listed in this syllabus, please make your request to me in writing and an alternative assignment and/or materials will be provided. The request should include your name, the child's name, the specific activity/materials in which you do not want your child to participate or to which you do not want them exposed, and the nature of your objection.

ASSESSMENT:

- **Grading:**

Grades are calculated using total points and are weighted based on the type of assignment. Any “special rubrics” for assignments will be provided when the assignment is made. **There is an End of Course Exam that constitutes 25% of the student’s final grade for the course.**

Knox County Grading Scale:

A	100-93
B	92-85
C	84-75
D	74-70
F	69 and below

Percentages of Assignments in this Course:

Students will be given a grade for all assignments. Your semester grade will be determined using the following weighted percentages:

- Daily work/homework – 15%
- Learning checks/quizzes– 20%
- Tests –40%
- End of Course Exam – 25%

- **Make-Up Work Policy/Late Work Policy**

Students should complete missed quizzes or exams within **3 days** of their return to school. Quizzes and tests should be completed in one of the designed school-wide make-up session. If a student is unable to attend one of these sessions, they can make-up work by appointment with the teacher either before or after school.

- **Re-do Policy**

Students will have the opportunity to re-do assignments, including tests and quizzes. The maximum grade for re-done assignments will be 90%. In order to qualify to re-do a test, students must attend a remediation session over the material being tested. Re-do assignments will be completed before or after school or during lunch. Missing assignments **do not count** as re-do. All re-do assignments must be complete at least 2 weeks prior to the end of the semester.

- **Summer Blitz/December Dash**

In the event that a student fails, they can attend Summer Blitz or December Dash to get course credit provided they meet the following criteria:

1. Have at least a 50 average.
2. Have at least a 90% attendance rate.
3. Have no more than 3 missing assignments.
4. Have attempted to re-do at least half of all failed Module exams.

- **Plagiarism Policy**

According to Harbrace Handbook, 15th edition:

“Plagiarism is defined as presenting someone else’s ideas, research, or opinion as your own without proper documentation, even if it has been rephrased. It includes, but is not limited to the following:

1. Copying verbatim all or part of another’s written work;
2. Using phrases, figures, or illustrations without citing the source;
3. Paraphrasing ideas, conclusions, or research without citing the source;
4. Using all or part of a literary plot, poem, or film without attributing the work to its creator.”

CONSEQUENCES OF PLAGIARISM

Plagiarism is a form of stealing and academic fraud. Students who are found guilty of plagiarism will have the option of either redoing the assignment within a specified time period and accepting a grade letter drop or taking a zero on the assignment. Parents should be involved in making the decision.

- **Portal Post Policy**

One way in which I am able to communicate with the student and parent is through Parent Portal. In order to give timely feedback, I will update grades at least once per week.

GENERAL EXPECTATIONS:

- **Students:** I want you to be successful. To do so, you must be in class!

- **Attendance Policy:** The Knox County attendance policy will be followed. Acceptable (excusable) conditions for students being absent from school include:

1. Personal illness;
2. Illness in the family temporarily requiring help from the child;
3. Death in the family;
4. Recognized religious holidays regularly observed by persons of the student's faith;
5. Verifiable family emergency.

Any absence not complying with the above reasons for excused absences will be considered as unexcused.

Examples of unexcused absences are (a) family vacations taken during the school year and (b) Senior Skip Day.

- **Tardy Policy:**

A student will be considered tardy if he/she is not inside the classroom before the tardy bell rings.

Students who are tardy will receive detention, which is to be served during the 1 hour lunch period on the specified day after the tardy has occurred. Failure to serve will result in ISS.

- **Honor Code:**

Students caught cheating on quizzes and exams will receive a grade of 0 with no chance of redoing the assignment. Students' parent will also be notified and a discipline referral will be sent to the appropriate grade level principal

- **Classroom Expectations:** Students will ...

1. Be courteous and respectful of others and their belongings.
2. Answer questions in class only if called upon.
3. Work on assignment from this class only.
4. Bring all necessary materials.
5. Bring bottled water only into the classroom.
6. Be on time and in your seat and start with warmup question when the tardy bell rings.
7. Not use cell phones during class time. I-pods may be used during individual work time only.

- **Teacher:** I will do my best to help you succeed. If you need help ...

Communication: E-mail me at dino.orucevic@knoxschools.org or call the school office at

933-3434.

Intervention Strategy: Students can come by before or after school and during enrichment for additional help or to make up missed exams or quizzes.