

PETERS TOWNSHIP HIGH SCHOOL

COURSE SYLLABUS: PRECALCULUS ACADEMIC

Course Information	Teacher Information
<u>Course Length:</u> Full Year <u>Class Location:</u> 220 <u>Teacher Website:</u> https://palermo.educatorpages.com	<u>Name:</u> Maura Palermo <u>Phone:</u> 724.941.6250 ext. 5303 <u>Email:</u> palermom@pt-sd.org

Course Overview and Essential Skills

- Pre-Calculus Academic is a course designed for students who have successfully completed Algebra II and are working towards continuing their Math knowledge into topics necessary to prepare them for Calculus or college-level Mathematics. Students will study functions and their graphs, Polynomial and Rational Functions, Exponential and Logarithmic Functions, Trigonometric Functions, Analytical Trigonometry, and Systems of Equations.

Course Textbook and Required Materials

- Pre-calculus with Limits – A Graphing Approach, 7th edition, Cengage Learning
- Online Books: www.cengagebrain.com
- Textbook, Folder, Notebook or 3-ring binder, Pencil, Graphing Calculator (TI-83 Plus, TI-84, or TI-84 Plus)

Course Outline of Material Covered:

Unit or Topic	Course Activities/Resources	Timeframe
Trigonometric Functions	Radian and Degree Measure, Unit Circle, Right Triangle Trigonometry, Graphing Trigonometric Functions, Inverse Trigonometric Functions	8 weeks
Analytic Trigonometry	Fundamental Identities, Verifying Trigonometric Identities, Solving Trigonometric Equations, Sum and Difference Formulas	4 weeks
Solving Triangles	Law of Sines, Law of Cosines	5 weeks
Prerequisites/Functions and their graphs	Factoring, Linear Functions, Parent Functions, Transformations of Functions, Function Operations, Composite Functions, Inverse Functions, Linear Regression	7 weeks

Polynomial and Rational Functions	Quadratic Functions, Polynomial Functions of Higher Order, Real Zeros of Functions, Complex Numbers, Fundamental Theorem of Algebra, Rational Functions and Asymptotes, Graphs of Rational Functions, Quadratic Regression	6 weeks
Exponential and Logarithmic Functions	Graphing Exponential and Logarithmic Functions, Properties of Logarithms, Solving Exponential and Logarithmic Equations, Exponential and Logarithmic Regression	5 weeks
Linear Systems and Matrices	Solving Systems of Equations (Graphing, Substitution, Elimination), Multivariable Linear Systems, Matrices and Systems of Equations, Operations with Matrices, Inverse Matrices	2 weeks
Intro to Limits	Limits (Graphically, Numerically, Analytically), Tangent Line Problem, Limits at Infinity and Infinite Limit	2 weeks

**Depending on the needs of the class or changes in the school year, the course outline is subject to change.*

Teacher Grading Policy:

- The grading scale for the district is as follows:

A	90 - 100
B	80 - 89
C	70 - 79
D	60 - 69
F	59 and below

The overall grade for a nine-week period will be determined by dividing a student's total points by the overall total points and multiplying by one hundred.

- Each student's grade will consist of the following:

Tests
 Quizzes/Pop Quizzes
 Partner Problems
 Class Activities
 Final Exam

Classroom Procedures and Expectations:

The following are my expectations for you. They are fairly simple and straightforward and will help to ensure that you have a successful experience this year.

I expect that you will:

- Arrive to class on time
- Arrive to class prepared with all materials listed above
- Show respect towards any teacher, fellow student, or visitor in our classroom
- Complete nightly homework assignments to the best of your ability
- Ask questions if you are not arriving at the correct answers
- Seek help from me outside of class when you do not fully understand a concept
- Not cheat or plagiarize any work that is intended to be a representation of your ability
- Not use your cell phone or I-pod in class
- Always strive to put forth your best effort
- Be patient ... learning and fully comprehending math concepts takes time

The following is what you can expect from me.

You can expect that I will:

- Show you respect
- Be prepared for every class in order to teach the material in what I believe to be the most effective/efficient way possible
- Provide you with homework assignments that directly reflect what was taught in class
- Provide immediate feedback on assignments completed for homework
- Provide you with an opportunity during class to ask questions and seek help with concepts that you are not fully understanding
- Make myself available outside of class to provide extra help to students who are struggling

Homework:

Homework will be assigned nightly. This is your chance to practice and apply the concepts taught during class. It is essential that you complete the nightly assignments as well as seek extra help as soon as you begin to struggle.

Tests/Quizzes:

Quizzes will be given after covering a few sections within a chapter. Tests may be given at the end of each chapter. There will be no retests!

Absence:

When absent, it is the student's responsibility to:

- Get assignments from the class website
- Collect handouts from the back of the room for the day(s) missed
- Get any missed notes from a RELIABLE friend or classmate
- Read the topic in the book with the examples that are provided
- Make an appointment with me after doing all of the above if help is still needed

- **Tests/Quizzes:**
 - a. If you were present the day before a test/quiz but you are absent the day of the test/quiz, you will be expected to take the test/quiz on the day you return.
 - b. If you are absent on a review day prior to a test/quiz day, you are still responsible to take the test/quiz on the regularly scheduled date.
 - c. It is your responsibility to arrange a time to make-up any quiz/test if you do not want to miss class time to take the quiz/test.

Cell Phones:

- **In order to avoid distractions, cell phones will not be permitted in class. The consequences for having a phone out are as follows:**

First Offense:	Warning
Second Offense:	Phone call/email to parent/guardian
Third Offense:	Discipline referral to assistant principal
- **As always, any device that is out during a Quiz or a Test will result in a 0% for that student on that assessment.**

Honor Code

- All academic work in this course follows the Academic Integrity Policy (#145) of the Peters Township School District. Students are expected to maintain the Peters Township Honor Code:
 - As a student of Peters Township School District, I recognize the value of my own learning and pledge to maintain honesty and academic integrity in all that I do. All work that I submit is my own.
- Any student that is unsure of the expectations of an assignment should seek clarification from the teacher.
- Upon submission of every assignment and assessment in this class, you are agreeing to comply and uphold the PTHS Honor Code.

Website Reminder

Absent a day? Get your assignment...homework is posted daily!

Check frequently for announcements, class documents, homework, and more.

<https://palermo.educatorpages.com>

- I have read and understand the class expectations and guidelines for Mrs. Palermo’s Pre-Calculus class.
- Upon submission of every assignment and assessment in this class, I agree to comply and uphold the PTHS Honor Code (Academic Integrity Policy (#145) of the Peters Township School District)

Print Student’s Name

Student Signature

Parent Cell/Work Phone Number

Parent/Guardian’s Email **(Please print clearly.)**

Parent/Guardian Signature