

# Trig/Pre-Calc Syllabus

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Welcome to Trig/Pre-Calc! This course takes an in-depth look at trigonometry and its connection to advanced mathematics. Topics will also include a preparation for the study of calculus and statistics. You will be analyzing data to draw conclusions, reflecting on your understanding of concepts, using graphing calculators to investigate mathematical properties, and creating new representations and building connections to concepts learned in previous courses. Support for this class is available online at [www.amc.glencoe.com](http://www.amc.glencoe.com).

**Textbook:** Advanced Mathematical Concepts: Pre-Calculus with Applications (Glencoe 2006)

## **Classroom Expectations:**

Be respectful  
Try your best

Be on time  
Complete all assignments

Be on task  
Follow the Study Team Guidelines

**Materials:** You need to bring the following **everyday** to class:

Notebook/Binder  
Textbook

Pencil

Homework    Graphing Calculator (TI-83 Plus or TI-84 Plus suggested)

Lined paper

**Notebook/Binder:** Each student needs a 3-ring binder with the following labeled dividers:

1) Notes

2) Classwork

3) Homework

4) Tests & Quizzes

5) Learning Log

6) Mathematics Portfolio

## **Homework:**

Homework is assigned every night and contains approximately 15 questions. Homework has been carefully designed to offer you practice of past skills and to help lay a foundation for future learning. You are encouraged to use your notes, classwork, previous homework, the Internet, and study teams to help you successfully complete the assignments. Find online help at [www.amc.glencoe.com](http://www.amc.glencoe.com). Assignments and resources will be posted online at Mr. Morgan's website [www.morganmath.com](http://www.morganmath.com).

## **Learning Logs:**

You will reflect regularly at the end of lessons in a Learning Log. These reflections include a description of your mathematical understanding in your own words and will go into a section of your binder called "Learning Log". The Learning Logs are a very important part of developing your mathematical knowledge and can serve as a reference tool and as a wealth of resources for your Mathematics Portfolio.

## **Mathematics Portfolio:**

You will create your Mathematics Portfolio throughout the course of this class. Your portfolio is a collection of work and reflections showing the scope of your mathematical understanding and skills. It may include your best work or work illustrating growth, teamwork, problem solving, or analysis. It may show your ability to solve large or challenging problems or your use of technology or one or more of the "Five Ways of Thinking". We will collect work to possibly include in your portfolio starting in the first week, and continue this process throughout the year until you complete your portfolio at the end of the course. Copies of work that you may want to use in your portfolio go into the section of your binder called "Mathematics Portfolio". A portfolio is a very large task-remember that it is important to gradually work on it and not wait until shortly before it is due.

**Grading:** Categories and percentages are approximate and may change based on actual assignments.

10% Classwork	90% – 100%	A
10% Homework	80% – 89%	B
15% Projects & Presentations	70% – 79%	C
50% Tests & Quizzes	69% or below	No Credit
15% Mathematics Portfolio		

## Trig/Pre- Calc Course Outline

Month	Topics	Days
September	Chapter 1: Linear Relations and Functions Chapter 4: Polynomial and Rational Functions	19
October	Chapter 5: The Trigonometric Functions Chapter 6: Graphs of Trigonometric Functions	21
November	Chapter 7: Trigonometric Identities and Equations	18
December	Chapter 8: Vectors and Parametric Equations	15
January	Chapter 9: Polar Coordinates and Complex Numbers	18
February	Chapter 10: Conics	19
March	Chapter 11: Exponential and Logarithmic Functions	16
April	Chapter 3: The Nature of Graphs Chapter 15: Introduction to Calculus	22
May	Chapter 12: Sequences and Series Chapter 13: Combinatorics and Probability Chapter 14: Statistics and Data Analysis	21
June	Various Topics	2 + Graduation