

MA9090/ PreCalc/Trig 2 Syllabus

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| Course Title----- | PreCalc/Trig 2 |
| Course Number----- | MA9090 |
| Grades:----- | 09-12 |
| High School Credit Value:----- | 0.5 |
| Prerequisites:----- | Successful completion of semester one of "Pre Calculus w/Trigonometry" |
| Course Length:----- | Regular courses: 17 weeks CR: 9-17 weeks. |
| Course Time:----- | Regular courses: 17 week schedule: 75 - 90 minutes per school day (6-7.5 hours per week) Credit Retrieval: 75 - 90 minutes per school day (6-7.5 hours per week) until course completion. |

{ Course Description }

This course is designed to go through the topics of Trigonometry and the related real world applications of trigonometric topics. After students complete this course they will have an understanding of how trigonometry is used in day to day life and how it relates to other mathematical topics. After completing the course, students will be able to: understand the major trigonometric topics, identify how the major trigonometric topics relate to real world situations, apply trigonometry to various problems, and explain how trigonometry is used within the greater context of mathematics.

The course focuses on the mastery of critical skills and the understanding of key concepts through Compass Learning Odyssey online interactive lessons and in discussions with the teacher. Upon logging into the program, students work and complete lessons followed by taking a quiz and / or unit test online, as well as a cumulative test of understanding of content to the point of completion in the class.

This course helps meet the state minimum requirements of 3.0 Mathematics credits. Please check with your district for more specific requirements. Both semesters of Pre-Calculus cover content in Federal Way Power Standards.

Course Materials:

State Alignments

Washington State Standards guided the design of the course. Learning expectations are found within the course itself.

This course follows the College Readiness Standards for Washington State. Please use the following link to view standards:

<http://transitionmathproject.org/standards/doc/2010-crs-16feb10-revisions.pdf>

Course Outline

| Units/Assessments | Topics |
|---|--|
| Getting Started | Getting Started Assignment |
| Functions and Graphs | Parent Functions and Transformations |
| Functions and Graphs | Properties of Functions |
| Functions and Graphs | Limits and Continuity |
| Functions and Graphs | Inverse Functions |
| Functions and Graphs | Piecewise Functions |
| Chapter Test: Functions and Graphs | Chapter Test: Functions and Graphs |
| Lines and Rates of Change | Linear Functions |
| Lines and Rates of Change | Rates of Change |
| Chapter Test: Lines and Rates of Change | Chapter Test: Lines and Rates of Change |
| Sequences and Series | Sequences and Series |
| Sequences and Series | Limits of Sequences and Series |
| Sequences and Series | Proofs by Induction |
| Chapter Test: Sequences and Series | Chapter Test: Sequences and Series |
| Polynomial and Rational Func. | Roots of Polynomial Functions |
| Polynomial and Rational Func. | Graphs of Polynomial Functions |
| Polynomial and Rational Func. | Graphs of Polynomial Functions |
| Polynomial and Rational Func. | Rational Functions |
| Chapter Test: Polynomial and Rational Func. | Chapter Test: Polynomial and Rational Func. |
| Exponential and Logarithmic Fun. | Exponential and Logarithmic Func. And Graphs |
| Exponential and Logarithmic Fun. | Base e |

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| Chapter Test: Exponential and Logarithmic Fun. | |
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