

# Rainshadow CCHS - Fall 2010 MV: Senior Math

## Concepts

This course explores Math as a means of interdisciplinary inquiry with an emphasis on the role of math in understanding its role in the real world.

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**Course Description:** This course completes and reviews Rainshadow math education with reference to number sense, computation, patterns, functions, spatial relationships (including advanced geometry and trigonometry), pre-calculus, problem solving, and communication as well as making connections across the disciplines. This course prepares students for math applications in careers, higher education, and practical problems solving. It delivers Rainshadow/Common Core standards for mathematics.

**Course Aims and Objectives for this course:**

Upon completion of this course:

- ~Students will become proficient in the real world relationships of trigonometric functions and their operations.
- ~Students will expand their understanding of what is required to become successful students in advanced settings.
- ~Students will explore pre-calculus concepts and formula as they apply to functions and problem solving.
- ~Students will apply mathematics to interdisciplinary issues and problems by examining, comparing and contrasting advance forms of measurements such as radians.
- ~Students will relate advanced mathematical concepts to their everyday lives and to social and political issues in their neighborhood, city, region, or nation.
- ~Students will explore math as a means of communication by translating mathematically language to everyday language.

**Requirements:**

- participation in classroom activities every day.
- complete warm ups each class period
- completed notebook and worksheet assignment
- completed notes and examples.
- completed Weebly and class essays

<u>Week / Dates</u>	<u>Monday</u>	<u>Wednesday</u>
1) 8/30, 9/1	Course intro and class expectations.	Weebly
2) 9/6, 9/8	Labor Day: No School	Note Taking skills for Seniors
3) 9/13, 9/15	Introduction/Review to Trig	Introduction/Review to Trig
4) 9/20, 9/22	Pythag. Trig Identities	Pythag. Trig Identities
5) 9/27, 9/29	Law of Sine	Law of Sine
6) 10/4, 10/6	Law of Cosine	Law of Cosine
7) 10/11, 10/13	Radians	Radians
8) 10/18, 10/20	Advanced Measurement Conversions	Advanced Measurement Conversions
9) 10/25, 10/27	Prof. Development: No School	Weebly Posting
10) 11/1, 11/3	Trig Compass	Trig Compass
11) 11/8, 11/10	Trig Functions	Trig Functions
12) 11/15, 11/17	Trig Function Relationships	Trig Function Relationships
13) 11/22, 11/24	Introduction To Calculus	Trig Function Relationships
14) 11/29, 12/1	Integration	Integration
15) 12/6, 12/8	Derivatives	Derivatives
16) 12/13, 12/15	Calculus Identities & Formulation	Calculus Identities & Formulation
17) 1/3, 1/5	Real World Applications	Real World Applications
18) 1/10, 1/12	Real World Applications	Real World Applications
19) 1/17, 1/19	MLK: No School	Semester Weebly Portfolio Completion

**Grading Policy and Assessment:** This class will be based on a point system spread out over the semester (19 weeks).

Point Breakdown:

**Attendance and Participation** – approximately 500 points

**Complete Folder of Work** – approximately 30 to 100 pts each; 1000 pts

- includes classwork, Notes, worksheets

**Warm-ups:** 20 pts each; total of approximately 700+ pts for the semester

**Folder, Notebook and Weebly Contents:** You will maintain a folder & notebook to be kept in-class with all of the assignments for this class. There is a specified manner in which notes and warm-ups are to be taken and kept please see warm-up 1 for a reference. You will also be required to create and keep a Weebly portfolio for this class (and all classes).