

**Boston Collegiate Charter School**  
**12<sup>th</sup> Grade Pre-Calculus Syllabus 2011-2012**  
**Tutoring:** *Tuesday and Wednesday, ROOM 130*

**Instructor:** Darren Burris  
**Phone:** (617) 265-1172 ext. 225  
**Email:** [dburris@bostoncollegiate.org](mailto:dburris@bostoncollegiate.org)

Course Website: <http://www.scholarsonmayhew.blogspot.com>

### **Course Overview**

This course will begin with a substantial review of Algebra II . The first semester will consist of a review polynomial and rational functions and introduce exponential and logarithmic functions. The second semester will focus on trigonometric functions and a brief introduction to sequences, series, and combinatorics.

Throughout the year, we will strive to reinforce Algebra II concepts and develop a broad understanding of how math works in real world applications. We will focus on learning how to think mathematically and communicate mathematical ideas clearly and precisely both verbally and in writing. We will work to become comfortable with the fact that learning math requires persistence and patience, and sometimes lacks immediate gratification. As always, students are expected to actively work, to be involved, to seek extra help when necessary, and to ask questions.

<b>Course Outline</b>	<b><u><a href="#">Khan Academy</a></u></b>
<u>First Semester</u> Unit 1 Nature of Graphs Unit 2 Polynomials and Rational Functions Unit 3 Exponential and Logarithmic Functions	November 1, 2011 Khan Academy sections starting with Addition through Exponents 2 are due (see handout complete list)
<u>Second Semester</u> Unit 4 Trigonometric Functions Unit 5 Graphs of Trigonometric Functions Unit 6 Sequences, Series, and Combinatorics	March 12, 2012 Khan Academy Section starting with Geometry 1 through Equations of Circles (see handout for complete list)

### **Grading (per quarter)**

Tests 35%, Quizzes 25%, Homework 20%, Classwork 20% (Classwork will include periodic checks concerning note-taking, on-task behavior when in groups, and written assignments)

The 11<sup>th</sup> and 12<sup>th</sup> Grade Late Policy is effect. A copy is posted on the course website.

### **Grade breakdown for the year:**

Q1	Q2	Midterm	Q3	Q4	Final
23%	23%	7%	23%	11%	13%

### **Textbook**

Advanced Mathematical Concepts: Precalculus with Applications. New York: Glencoe, 2004.

Online Text: <http://cnx.org/content/col10624/latest/>

### **Materials/Supplies**

- A TI-83 graphing calculator.
- Binder with paper for note-taking.
- Writing utensil