

Boston Collegiate Charter School
Algebra II Course Syllabus 2010-2011

Instructor: Ms. Franklin
Phone: (617)265-1172 ext. 227
Email: mfranklin@bostoncollegiate.org
Tutoring: Ms. Franklin Tues/Wed/Thurs (3-4pm in Barnard 350)

Course Overview

Algebra II is designed as an extension of Algebra I and as a transition to Statistics and Pre-calculus. The aim of this course is to develop solid algebra and problem-solving skills that serve as the basis for all higher mathematics with a focus on science and business applications.

The first semester will begin with a review of basic algebra topics and quickly transition into applying these concepts to real-life applications. The class will spend a significant amount of time with linear equations and linear regression models during the first quarter. The second quarter will begin with an emphasis on systems of equations and linear programming problems. The quarter will close with an introduce quadratic to functions and their application in real-world situations (specifically, position functions and area problems). Students will apply their knowledge of linear and quadratic functions to solving, evaluating and graphing polynomial and rational functions throughout the third quarter. The last quarter will begin with a brief overview of roots, radicals, and probability and will close with an introduction to conic sections.

All students enrolled in this course should consider taking SAT subjects test Mathematics Level I on June 2, 2012

TOPIC OVERVIEW

First Semester

- | | |
|--------|---|
| Unit 1 | Functions |
| Unit 2 | System of Linear Equations and Inequalities |
| Unit 3 | Polynomial Functions 1 (Quadratic Functions) |
| Unit 4 | Polynomial Functions 2 (nth degree polynomials) |

Second Semester

- | | |
|--------|------------------------------|
| Unit 5 | Introduction to Statistics |
| Unit 6 | Rational Functions |
| Unit 7 | Radical Functions |
| Unit 8 | Permutation and Combinations |

Logistics

Class Meeting Time:

Tutoring:

Text: Larson, Boswell, Kanold and Stiff. *Algebra 2: Equations, Graphs, and Applications*. McDougall Littell, 2004

Required Material:

- TI-83 Graphing Calculator (or equivalent)
- Three-Ring binder with paper (notes!)
- Additional Notebook (optional)
- Pencils

Grading

Grades are calculated *each quarter* using the following weights:

Exams = 35%, Quizzes = 25%, Classwork = 20%, Homework = 20%.

Grade	Q1	Q2	Mid-term	Q3	Q4	Final
11	20%	20%	7%	20%	20%	13%

HOMEWORK POLICY:

No late homework will be accepted. If a student is absent, he/she must turn in the homework the day he/she returns to school or within one day of returning and will receive full credit. The 11th Grade Absence and Late Submission Policy applies to this class.

On the upper right hand corner of *every* assignment, please write your name, class period, date and assignment. All work must be shown and answers should be boxed. Make sure your handwriting is clear and legible.

CLASSWORK POLICY

Classwork and class participation are worth 20% of the quarterly grade. It is so important to be an active and vocal participant in class. Questioning and discussing new material are critical to understanding challenging work. Students' notebooks will not be collected, but they may be assessed by pop notebook quizzes. Weekly do now sheets will be collected and graded; these make up the majority of the class work grade.

ABSENT POLICY

Students are strongly encouraged not to be absent, but if you must, you will be responsible for turning in the assignment **due** the day they missed on the day they return. The homework **assigned** on the day they missed will be due the following day unless otherwise discussed. Students are responsible for seeing the teacher for missed assignments on the day of their return. If a student misses a test or a quiz, they are responsible for making up the missed quiz or test within a reasonable amount of time. See me on the day you return to schedule a time to make up a missed test or quiz.

CLASS PROCEDURES

- Entering the Classroom: Enter the classroom, pick up handouts at the front of the room and start the Do Now. When the bell rings, you should be silent with your materials out and your backpack on the floor. If you are coming in after the bell rings you are late and will receive a demerit.
- Exiting the Classroom: Wait to be dismissed by Ms. Franklin
- Getting Out of Your Seat: You must request permission to get out of your seat for any reason. Raise your hand and wait for Ms. Franklin to call on you.
- Passing in Work: Ms. Franklin will collect classwork most days and grade it for correction.
- Leaving the Room: You may go to the bathroom during appropriate times during class. You will not be allowed to go right after class begins and at the end of class. Raise your hand to ask if you must go and then sign out.
- Absent: If you are absent, you are responsible for making up the classwork and homework (and handing in the homework) within one day. Worksheets from your missed class will be left in the back of the classroom for you pickup. Ask a classmate for the notes and any textbook assignments. Come to tutoring with any questions or concerns. Extended absences will be handled on a case by case basis.
- Preparedness: If you arrive without any of your materials, please try to borrow them before the bell rings from a classmate. Once the bell rings, you will receive a demerit for being unprepared and will not be allowed to go to your locker to get what you forgot.
- Demerits and detentions will be awarded based on BCCS school policies.

WEBSITES

The internet can be used as a great learning tool! Here are a couple websites I suggest:

Math.com: <http://www.math.com/>

This provides good explanations, practice exercises, and instant feedback.

Free Math Help: <http://www.freemathhelp.com/algebra-help.html>

This site has some good, short videos if you want to review something we learned in class. There is also a message board to ask specific questions.