

# Algebra 2 Syllabus

2010-2011 Semester 1

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Welcome to Algebra 2! In this course you will be investigating new situations, discovering relationships, and learning strategies to solve problems while studying in depth the concepts of advanced algebra. The knowledge and skills that you learn in this course as well as ways of thinking and problem solving are extremely useful in all future math courses and in other contexts outside of mathematics. Support for this class is available online at [www.cpm.org](http://www.cpm.org).

**Textbook:** Algebra 2 Connections (CPM Version 3.0 ©2008)

## **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 10 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.cpm.org](http://www.cpm.org). 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.

### Study Teams:

To meet the challenges of advanced algebra you will be working in study teams everyday. Working in study teams means speaking up, interacting with others, explaining and sharing ideas, asking questions, and listening to what others have to say. Learning math through study team investigations is extremely advantageous- actively participating, asking questions, discussing possibilities and concepts, and explaining your understanding to others will help you understand mathematics at a deeper level than ever before! Study team members will have particular roles in their group and both the roles and groups change throughout the course. Team roles include **Facilitator, Team Captain, Recorder/Reporter, and Resource Manager.**

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

10% Classwork & Team Participation	90% – 100%	A
20% Homework	80% – 89%	B
10% Projects & Presentations	70% – 79%	C
50% Tests & Quizzes	69% or below	No Credit
10% Mathematics Portfolio		

## Algebra 2 Connections Course Outline

Month	Topics	Days
September	Chapter 1: Investigations and Functions (7 days) Chapter 2: Sequences and Equivalence (7 days) Chapter 3: Exponential Functions (7 days)	21 days
October	Chapter 4: Transformations of Parent Graphs (7 days) Chapter 5: Solving and Intersections (7 days) Chapter 6: Inverses and Logarithms (5 days)	19 days
November	Chapter 6: Inverses and Logarithms (3 days) Chapter 7: 3-D Graphing & Logarithms (7 days) Chapter 9: Polynomials (7 days)	17 days
December	Chapter 11: Conic Sections (7 days) Chapter 12: Series (6 days)	13 days
January	Chapter 10: Probability & Counting (8 days) Chapter 8: Trigonometric Functions (? days) Chapter 13: Analytic Trigonometry (? days) Finish Portfolios  Last school day of Semester 1 is on _____.	14 days