



Houston Independent School District
S.P. Waltrip High School
1900 West 34th Street, Houston, Texas 77018-6186
Phone: 713-688-1361 Fax: 713-957-7743 · Website: www.houstonisd.org/waltriphs



College Preparatory Mathematics (CPM) Syllabus 2018-2019

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Tutorials are available: Mon & Wed from 7:30 am – 8:15 am.

WELCOME TO College Preparatory Mathematics (CPM)

The curriculum for the CPM course has been developed through a partnership involving Houston ISD mathematics teachers, the HISD Curriculum and Development Department, and the Houston Community College. The content of the course synthesizes concepts from the HCC developmental mathematics courses MATH 0409 and MATH 0312 and includes concepts from College Algebra MATH 1314. The purpose of the College Preparatory Mathematics (CPM) course is to provide an opportunity for high school seniors to demonstrate college readiness in mathematics so they are able to begin taking credit-bearing courses their first year of college without mandatory enrollment in developmental mathematics courses. The prerequisite for enrollment in the CPM course is Algebra II. The CPM course may count as a fourth-year mathematics course required for graduation starting the 2015-16 school year.

College ALGEBRA TOPICS:

Unit 1: One-Variable Equations & Inequalities

Students solve and apply linear equations and inequalities in one variable

Unit 2: Linear Equations and Inequalities

Students analyze, graph, and write various forms of linear equations and inequalities using multiple representation in mathematical and real-world contexts.

Unit 3: Systems of Equations & Inequalities

In real-world situations, students solve and analyze systems of linear equations and inequalities with two variables using graphs, tables, and algebraic methods.

Unit 4: Polynomials and Operations

Students evaluate, analyze, perform operations on, and apply properties of polynomials.

Unit 5: Polynomials and Factoring

Students explore various methods of factoring polynomials.

Unit 6: Quadratic Equations

Students analyze, graph, and solve quadratic functions and inequalities and connect the attributes and solutions to real world situations using multiple representations.



Unit 7: Rational Expressions and Equations

Students analyze, perform operations on, and solve equations and application problems involving rational expressions, including rational exponents.

Unit 8: Radical Expressions and Equations

Students analyze, perform operations on, and solve equations and application problems involving radical expressions and equations.

Unit 9: Absolute Value Equations, Inequalities, and Functions

Students solve, analyze, and graph absolute value equations and inequalities.

Unit 10: Factoring Completely

Students use factoring techniques including factoring by grouping, completing the square, sum of two cubes, and difference of two cubes to factor polynomials.

Unit 11: Transformations and Attributes of Quadratic Functions

Students analyze the transformation of a quadratic function in

$$f(x) = ax^2 + bx + c \text{ and}$$

$$f(x) = a(x - h)^2 + k \text{ forms through multiple representations.}$$

Unit 12: Quadratic Equations, Inequalities, and Functions

Students write, and solve quadratic equations by factoring, completing the square, and applying the quadratic formula, and apply these methods to solving real-world problems.

Unit 13: Systems of Quadratic Equations and Linear Equations Inequalities

Students analyze a system of equations in two variables consisting of a linear equation and a quadratic equation.

SIX WEEKS GRADING POLICY:

30% Major Grades (tests, Quiz, projects, etc.)

20% Daily Grades/participation

50% Classwork/Homework

Re-Test Policy: (Only for failed tests)

1. **1** Tutorial session is required prior to re-test.
3. The re-test must occur **within ONE week** of the return of the original test.
5. Maximum score on re-test: 70



HOMEWORK

Expect to have AT LEAST 6-8 homework assignments per cycle. Attempt ALL assignments, and put forth a college-student effort. All assignments must SHOW work (when applicable) – just answers are **NOT** accepted. “*No work, no credit*” (NWNC). Attempting all homework assignments have a positive correlation with higher quiz and test grades. *Any work not turned in will result in a zero. Zeroes are detrimental to your six-weeks' grade.*

ABSENCES:

If you are absent, **it is your responsibility** to discuss make-up with your teacher.

1. If you are absent the day an assignment is **due**, it must be turned in the day you return.
2. If you are absent the day an assignment is **assigned**, it will be due the following day you return to class after assignment is received.

CLASS MATERIALS:

Each student must maintain a **math only** notebook for study and documentation. Every student must bring a laptop to the class every day. All returned work should be placed in the notebook within the specific section, not loose in binder or backpack. The supplies needed (due by Monday, September 10, 2018) are:

Mandatory:	Optional, but recommended
1. Laptop	4. Set of Markers
2. Loose-leaf paper;	5. Binder/Notebook
3. #2 pencils	6. Tissues
	7. Hand Sanitizer

Note: If you know that you will have difficulty acquiring these materials by the due date, please notify me IMMEDIATELY. Do not wait until the due date. We will come up with a solution in order for you to obtain the required supplies in a reasonable amount of time.

CALCULATOR:

A TI-84 Plus will be used in the classroom. A classroom set of calculators may be used while in class – each one assigned by number. Students will also download the calculator app on their laptop. Students do not need to purchase their own TI-84 calculator, but if they do so, they can use it in class, and it will be beneficial to have one for future college math courses.



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CLASSROOM NORMS:

- ✓ Be on time - you miss out when you're late; (*tardies* are **NOT** acceptable)
- ✓ Be prepared – **Bring all materials daily**
- ✓ Follow oral and written directions
- ✓ Respect the rights of others
- ✓ Put forth your best EFFORT (You can't be extraordinary, if you do average work)
- ✓ No cell phone during class time. Your phone will be confiscated if you use them while class is in session; parent conference may be required for non-compliance.



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College Preparatory Mathematics (CPM) Course Student and Parent Signature Form

I have read and discussed the **College Preparatory Mathematics (CPM) 2018-2019** Syllabus and accept responsibility for meeting these expectations in class. Please complete all lines of this form. If not applicable, indicate by "N/A".

Student Name (print)

Date

Student Signature

Date

Parent/Guardian Signature

Date

Parent/Guardian daytime phone _____ (work) _____ (cell)

Relation to student: _____

Parent/Guardian's e-mail address: _____

Parents/ Guardians: Please complete all lines of the information above and have your son/daughter promptly return this page only.