



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



HADV Algebra 2 SYLLABUS 2021-2022

Anasuya Chowdhury - achowdhu@houstonisd.org
Tutorials are available: Tue & Thurs from 7:30 am – 8:15 am.

WELCOME TO HADV ALGEBRA 2:

This HADV Algebra 2 class will allow students to explore mathematics and develop critical thinking skills. Students will use previously acquired algebraic and geometric skills to solve systems of equations and inequalities. Problem solving strategies will also be an important tool for learning about matrices, quadratic functions, exponential, logarithmic, polynomial, rational, radical and trigonometric functions. The classroom will be a place for mathematical discussion and investigation. Students will complete several Model Instructional Units from their text book and using Laying the Foundation materials. Some materials from Springboard (Springboard is created by the College Board to help bridge the gap between high school and college expectations and will help to strengthen students' problem solving, critical thinking, and reasoning skills as they pertain to reading, writing, and mathematics) also will be used to enhance instruction.

HADV ALGEBRA II TOPICS:

Unit 1: Develop a Family of Functions and Data Regression

Unit 2: Analyze Transformations of Functions using multiple representations

Unit 3: Connect the relationships between composition and inverse of function

Unit 4: Analyze and solve Systems of Equations and Inequalities with multiple representations

Unit 5: Explore various methods to factor and solve Quadratic Functions including Complex Numbers.

Unit 6: Analyze and solve Square Root Functions and Cube Root Functions

Unit 7: Analyze the attributes of Polynomial Functions

Unit 8: Analyze Inverse variations & Transformations of Rational Functions

Unit 9: Analyze transformations and inverses into Exponential and Logarithmic Functions

Unit 10: Solve Applications of Exponential Functions

Unit 11: Graph, translate and classify Conic Sections

Unit 12: Develop the relationship between the unit circle and the definition of the periodic function



SIX WEEKS GRADING POLICY:

- 30%** Major Grades (Tests, Quizzes, Major Projects, etc.)
- 20%** Daily Grades/participation
- 50%** Classwork/Homework/Minor Projects

Re-Test Policy: (Only for failed tests)

1. Parent and student signatures are required on original test.
2. **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.
4. Maximum score on re-test: 70

HOMEWORK

Expect to have AT LEAST 10 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*” (NWNCR). 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 are:

- | | |
|---|--|
| 1. 1 - 2”, three-ring binder (Optional) | 4. Colored markers/ highlighter (Optional) |
| 2. Loose-leaf paper; | 5. Notebook |
| 3. #2 pencils | 6. Laptop |

CLASSROOM PROJECTS: A major project and some minor projects will be assigned each semester. Projects are group or individual depending on the topic. Students will be awarded a Major grade for the projects



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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 may also be encouraged to download the calculator app on their laptop.

CLASSROOM NORMS:

- ✓ Be on time - you miss out when you're late
- ✓ 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 are allowed during class time without special permission; 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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HADV Algebra 2 Course Student and Parent Signature Form

I have read and discussed the **HADV Algebra2 2021-2022** 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 by Friday, August 30, 2021.