

Algebra 1A
09-10 Course Syllabus
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school notes page: <http://new.schoolnotes.com/bdubsrebels/>

Course Description:

Algebra 1A is a class designed to be taken the freshman year of high school and be followed up with Geometry and Algebra 1B, essentially giving the student the knowledge of the topics learned in Algebra 1 while spreading it out over two years. Algebra 1A starts with pre-algebra review and finishes with the foundations for a bridge to the abstract thinking needed to be successful in Algebra. The class starts with a review of integers and real numbers and operations on these numbers. The class topics will include basic statistics, solving equations, area and volume, probability, and systems of equations, but are not limited to these.

Instructional Philosophy: This course will be broken up into chapters. Each chapter will include homework assignments, quizzes, and at least one authentic assessment activity. Classroom activities will include reading, writing, research, projects, labs, problem solving, and assignments dealing with algebraic concepts. There will be a major test at the end of each chapter and a quarter final at the end of each quarter, which will be over all material covered in the given quarter. It is expected that all students will show their steps in the solution process of every problem, essentially **STUDENTS MUST SHOW WORK!** Students are given an opportunity to work on assignments in class. This is a privilege and if abused can and will be taken away, meaning no time in class for assignments. An emphasis will be made in this class to focus on the End of Course Exam, ACT and all things leading to our students being successful on this all-important test as well as in high school.

Major Course Goals:

- **Explore and evaluate algebraic expressions and operations of integers**
- **Use order of operations to solve one-step equations and inequalities**
- **Write, order, and translate decimals, fractions, and percents**
- **Explore rules and principles associated with factoring and using powers**
- **Solve problems involving ratios and proportions**
- **Solve equations and inequalities**

Major Course Objectives/Benchmarks by Quarter:

1st Quarter:

- What is an algebraic expression and how can it be used in real-life problems? Why is it important to know how to perform operations involving integers? How can I use graphs of ordered pairs to illustrate tendencies? How is solving equations similar to and different from solving inequalities?

2nd Quarter

- Why is estimating with decimals important for everyday life? How can I solve equations that involve decimals? Why is important to be able to use and convert with metric units of measure? How can I use factors and exponents to solve real world problems involving arrangements and magnification? How can using scientific notation help to solve problems involving weight and mass?

3rd Quarter

- How can simplifying fractions and decimals help me to solve real-world problems involving buying and preparing food? Why and how is it sometimes useful to solve problems by working backward? How can being able to write and solve proportions make things easier in the real world? How can I use tables to solve problems?

4th Quarter

- How can I solve multi-step equations and two-step inequalities to solve problems involving finance and saving? How can transforming and using formulas help in finding travel times?

Why is important to know about simple and compound interest in my everyday life? How can I use graphs of equations and inequalities to solve real-world situations involving grocery shopping and earnings from jobs?

Major Course Projects and Instructional Activities: Instructional activities will include but are not limited to: lecture, homework assignments, authentic assessments, quizzes, and chapter tests, quarter finals, reading assignments, and writing assignments. There will be a major project each semester. These projects will show how math can be applied in real-world situations.

Required Readings: You are required to read the pages included with each lesson. Items from this reading will appear on your homework and may appear on quizzes/tests. You may also be required to read various articles and report on them.

Recommended Readings:

- Algebra Unplugged
- The Book of Think: Or, How To Solve a Problem Twice Your Size
- Jack Buck-Remembered
- A Case for Christ
- I Hate Mathematics Book
- Math for Smarty Pants
- A Beautiful Mind

Course Assessment Plan:

- A. There will be a test after each chapter. Each test will be worth 100 points. These problems will consist of problems similar to problems from the assignments, pre-test, or activities within the chapter.
- B. Pop quizzes and bonus work will be given periodically at the teacher's discretion and will vary in points. Pop quizzes and bonus work cannot be made up if the student is absent
- C. Each student will need a notebook with all of the algebra notes taken from the class. The students can use their notes on the test and a grade will be taken on the notebook approximately every 3-4 weeks. (If you are absent, you are still responsible for the notes taken on that day!)
- D. All assignments will be graded on a partial credit system of grading. Meaning you will get credit for notes and writing out explanations of answers.
- E. Grades for this course are determined as follows:

50%	Tests
20%	Quarter Final
15%	Homework
10%	Notebooks/Writing Assessments
5%	Labs/Quizzes

It is very important to do your homework and prepare yourself for the tests, not just one or the other.

- F. Quarter Final Schedule; See Student Planner
- G. Semester Grades will be determined as follows:

50%	1 st (3 rd) Quarter
50%	2 nd (4 th) Quarter

Classroom Expectations:

1. Students will respect their fellow classmates, the teacher, and themselves at all times.
2. Students will use their ears and brains at all times while in this class
3. No food or drink in this classroom(bottled water is excepted)
4. Ask questions when you don't understand
5. Always be prepared for class: paper, writing utensil, calculator, textbook, homework, reading book, and planner (random planner checks will be given and points assigned for these checks will contribute to your homework grade).
6. Students must attend class and be on-time, ready to work when the bell rings. This is essential in the real-world as well as in my class. If a student must be absent talk to me ahead of time to

know what assignments/ projects, etc you will miss. In cases of emergencies please use the school notes web page to find out what you are missing. This webpage is updated at least weekly and has assignments, etc that we will be doing in class for that week. The website is <http://new.schoolnotes.com/bdubsrebels/>

7. The most important expectation of all is to always try!
8. Always use a pencil in this class.
9. Respect! Respect! Respect!

Supplies and Materials Needed:

- A. Paper and pencils.
- B. Calculator
- C. Notebook or binder for notes (remember, you can use note cards on tests).
- D. Planners (Have them all of the time and have them filled in)

Homework Policy and Grading Scale: Please refer to the Student Handbook for the Homework Policy. The grading scale is as follows:

A.....100-95 A-.....94-90 B+.....89-87 B.....86-83 B-.....82-80 C+.....79-77
C.....76-73 C-.....72-70 D+.....69-67 D.....66-63 D-.....62-60 F.....59-0

Extra Help: I am more than willing to help any and all students be successful in this class, but it is the student's responsibility to ask for help. If a student needs help before school, they can make plans with me to be here early. Students may also take advantage of our extra help program P.A.S.S., which takes place after school. My P.A.S.S. days are Monday and Tuesday from 2:45- 3:30 when the PASS program begins. **Please know that a student does not have to be assigned to pass in order to take advantage of the program.**

ADDITIONAL HELP: The books we have come with a variety of programs that can help students outside of the classroom. Throughout the book you will find links to the Prentice Hall Web site. Use the web codes provided with each link to gain access to online material.

- Go to PHSchool.com
- Enter the web code of the lesson you desire
- Click Go!

For every lesson there is an online quiz, which you can access with the web code ata-0101(for ch.1 lesson 1) through ata-1208 (for chapter 12 lesson 8). Also every lesson has additional online help for students to complete homework, including a video tutor for the material.

Time and Place to be Reached by Parent: My school email address is bwallen@centralr3.org. This is probably the best way to reach me. Please feel free to email with any questions and/or concerns and I will do my best to reply. I can also be reached at the high school by calling 431-2616, extension 4160. My planning period is from 1:50- 2:40 and this will probably be the best time for me to return your calls.