# Algebra 2

# Course Outline

## **Teacher Information**

**Teacher:** Mr. Brad Jones

**Office Hours:** M,T,F 11:02-12:25 R 10:45-12:36 and before

School Hours: M,T,R,F 7:24-2:12 W 7:24-1:12 School e-mail: brad\_jones@isdschools.org

**Website:** sites.isdschools.org/bjones

#### **Classroom Rules & Procedures**

- ✓ Be prompt and prepared for class.
  - Bring supplies to class (book, paper, pencil, pen, notebook,...).
  - Stay seated throughout class.
  - Assignments out and ready to check.
  - Come rested and ready to work. (Your head will remain off the desk or you will stand)
  - Go to the bathroom before class.
  - Students will not leave classroom during class.(unless a dire emergency under my discretion)
- ✓ Be Respectful, Responsible
- ✓ Do not go behind Mr. Jones desk.
- ✓ No food or drink in the classroom.
  - You may have water in a clear bottle with a cap (not flavored/colored).
  - You may chew gum, but if I see it or hear it you will lose that privilege.
- ✓ Do not write in/on the textbooks, desks or walls.
- ✓ Give 110% at all times.
- ✓ Ask Questions!!!!! If you need extra help or don't understand something it is your responsibility to let me know.
- ✓ Have fun and enjoy math.
- ✓ The bell does not dismiss you, Mr. Jones does.
- ✓ No cell phones in class- If I see(even hanging out of your pocket) it I take it.
- ✓ Students are to keep a three ring notebook of all bellwork, definitions, notes, homework, handouts and grade sheets. This will be graded per trister or at my discretion.
- ✓ Homework/Hw Quiz will be 15%, Test/Quizzes/Projects/Notebook will be 70%, Attendance 15% of the final grade.
  - Rules and Procedures may be added or omitted at Mr. Jones discretion.

#### **Assignment Guidelines**

- ✓ Papers with no name will not be graded.
- ✓ All work is to be done in PENCIL and grading in PEN.
- ✓ It must be legible and easy to follow. Don't run problems together. If I can't read it, it's wrong.
- ✓ Show all work. You must copy the problem (except word problems) and show enough steps to communicate your thought process. Partial credit may be given at any time. Using an answer book is considered cheating.
- ✓ No work will be accepted with a ragged edge from a spiral notebook.
- ✓ Multiple pages are to be stapled together and all pages should have the student's name and date
- ✓ Homework may be graded as a class; if you make grading errors you will earn a zero for academic dishonesty.

# **Late work/ Attendance Policy**

- ✓ Late work will not be accepted.
- ✓ You are responsible for getting the work from the website for when you were gone.
- ✓ A student must be gone two or more days right before the test in order to reschedule the test. You must reschedule the test in a timely manner or I will reschedule it.
- ✓ Homework quizzes will be made up the next class time.
- ✓ An attendance/participation grade is given daily. It is two points a day; 1 for being in the classroom, 1 for working hard during class time. Points can be made up by coming in at 6:50am for a study hall.

#### **Test Retakes**

✓ If you earn below a 75% on a test, you have the option of retaking it. It must be before school within a week of the original testing date. If the class retakes the test together you cannot retake the test again.

### **Classroom Management Steps**

- ✓ Verbal warning.
- ✓ Change of seating..
- ✓ 30min detention with Mr. Jones before school.
- ✓ Principal Referral.
  - Steps can be skipped or added where Mr. Jones feels necessary.

	Grading				
100 – 93 %	A	82 - 80%	B-	69 - 67%	D+
92 - 90%	A-	79 – 77%	C+	66 - 63%	D
89 - 87%	B+	76 - 73%	C	62 - 60%	D-
86 - 83%	В	72 - 70%	C-	Less than 60	F

❖ Grades will include: Daily Homework, Quizzes, Test, Notebook, Participation, Research Papers, and Projects. Others may be added at Mr. Jones discretion.

## Skills and/or Competencies to be covered

Text: 2008, McDougal Littell: Algebra 2

- ✓ <u>Algebra 1</u>: Order Of Operations, Evaluating Expressions, Simplifying
- ✓ <u>Equations/Inequalities</u>: Solving (Multi-Step, Absolute Value, Compound Inequalities), Distance-Rate-Time, Word, Mixture, Word Problems
- ✓ <u>Linear Relations/Functions</u>: Graphing, Reading/Writing, Absolute Value, Inequalities
- ✓ <u>Systems of Equations/Inequalities</u>: Systems of Two and Three, Graphing, Solving (Graphing, Elimination, Substitution), Word Problems, Three Dimensions
- ✓ Matrices: Operations, Multiplication, Determinants, Inverses, Cramer's Rule, Equations
- ✓ Complex Numbers: Adding, Subtracting, Multiplying, Absolute Value, Graphing, Rationalizing Denominators
- ✓ <u>Quadratic Functions/Inequalities</u>: Graphing, Solving (Graphing, Square Roots, Factoring, Completing The Square, Quadratic Formula), Factoring (Trinomials, Special Cases), Completing The Square, Discriminant
- ✓ <u>Polynomial Functions</u>: Naming, Adding, Subtracting, Multiplying, Dividing, Factoring (Grouping, Sum/Difference of Cubes, Quadratic Form), Synthetic Division/Substitution, Roots, Factors, Remainder Theorem, Factor Theorem, Imaginary Root Theorem, Irrational Root Theorem, Reading/Writing, Rational Root Theorem, Rule of Signs, Fundamental Theorem Of Algebra, Solving (By All Methods)
- ✓ <u>Probability:</u> Permutations, Combinations, Odds, Order, Experimental, Theoretical, Truth Tables
- ✓ <u>Functions</u>: Evaluating, Operations, Inverse
- ✓ <u>Radical Functions/Exponents</u>: Simplifying, Operations, Dividing Expressions, Exponents vs. Expressions, Laws Of Exponents, Solving, Graphing, Domain, Range
- ✓ <u>Rational Expressions</u>: Graphing (Simple, General), Simplifying, Adding, Subtracting, Multiplying, Dividing, Complex Fractions, Solving
- ✓ <u>Exponential/Logarithmic Functions</u>: Graphing, Solving, Reading/Writing, Evaluating, Inverses, Properties, Common Logarithms, Natural Logarithms, Compound and Simple Interest
- ✓ <u>Sequences and Series</u>: Sequences (General, Arithmetic, Geometric), Arithmetic/Geometric Mean, Series (General, Arithmetic, Geometric, Infinite Geometric)
- ✓ <u>Trigonometry</u>: Angles And Measures, Radians/Degrees, Conterminal Angles, Arc Length, Sector Area, Right Triangles, Functions, Law of Sines, Law Of Cosines, Heron's Formula, Graphing Functions, Equations
  - Topics may be added or omitted at Mr. Jones discretion.