

COURSE OVERVIEW 2013-2014

TITLE OF COURSE	Algebra 1
TEACHER'S NAME	Ms. Opp
Course Information	3 rd & 4 th Hours Room: 219 Duration: All year – one credit
Teacher Information	Phone # 810-591-5433 Email address: dopp@carman.k12.mi.us <ul style="list-style-type: none"> Email is the best communication with parents and students.
Prerequisite(s)	Pre-Algebra
Course Description and Overview of Content	Algebra 1 is now a required class for all Michigan high school students and is required for high school graduation. Algebra can be considered to be the language of mathematics. Students will receive a well-rounded mathematics curriculum emphasizing real-life problem solving.
Course Goal/ Essential Outcomes	<p>This course covers topics such as: Functions, Linear Equations, Polynomials, Factoring, Radical and Rational Expressions, Statistics, and Probability.</p> <ul style="list-style-type: none"> Unit 1: Expressions and Equations Unit 2: Linear Functions Unit 3: Polynomials and Nonlinear Functions Unit 4: Radical and Rational Functions Unit 5: Data Analysis <p>Students will demonstrate their understanding of:</p> <ol style="list-style-type: none"> Properties of Algebra and how to use them: <ol style="list-style-type: none"> Associative Properties Commutative Properties Reciprocal Properties Distributive Properties Solving one and two-stop equations and inequalities and how to graphically represent those solutions. Adding, subtracting, multiplying and dividing algebraic and numerical expressions (simplifying and combining like terms). Coordinate Planes: the axes, origin, ordered pairs, how to plot points, determine slopes, and graph lines from data tables. Calculating percentages, basic operations with decimals and fractions, and translations between decimals, percents and fractions. Slope and linear equations in slope-intercept and point slope form. Rates, ratios, proportions and size changes. Solving for a designated variable given an equation with several variables. Systems of linear equations and inequalities using substitution, elimination and graphing, and identifying when it is most useful to use a specific method. Exponential growth, exponential decay and compound interest by solving real-world problems then graphing solutions. Polynomials, their characteristics, and how to perform the four basic operations on them. Factoring algebraic expressions using methods such as greatest common factor, grouping, general factoring, and special types of factoring such as difference of squares. Quadratic Functions: graphing them and understanding the characteristics of the graph, vertex form, and solving them, using different methods such as completing the square, factoring, and quadratic equations. Performing calculations involving square roots and complex numbers. Analyzing data and displaying it graphically (i.e. scatterplots).

Texts and/ or Other Materials	Text: Glencoe McGraw-Hill Algebra 1, 2005 Required Materials: 1. 3-ring binder 2. loose paper or spiral notebook for notes 3. pencils (NO PENS for homework, quizzes, tests, etc.) Recommended Materials: scientific calculator or TI83/TI-83 + graphing calculator.																												
Format and Activities	Teacher responsibility: Lecture, lead whole class discussions, facilitates small and large group hands-on activities and provides assistance on class work. Student responsibility: Take notes, participate in individual and whole class activities including in-class projects, and investigations and ask questions to clarify understanding of material.																												
Grading Practices and Procedures	Semester Grade: Semester grades will be calculated using the following weights: 35% Tests, 25% Quizzes, 20% Homework, 20% Final Exam Marking Period grades are a reflection of the student's semester grade to date (cumulative). <table><tr><td>Grade</td><td>Percentage %</td><td>Grade</td><td>Percentage %</td></tr><tr><td>A</td><td>100-93</td><td>C</td><td>76-73</td></tr><tr><td>A-</td><td>92-90</td><td>C-</td><td>72-70</td></tr><tr><td>B+</td><td>89-87</td><td>D+</td><td>69-67</td></tr><tr><td>B</td><td>86-83</td><td>D</td><td>66-63</td></tr><tr><td>B-</td><td>82-80</td><td>D-</td><td>62-60</td></tr><tr><td>C+</td><td>79-77</td><td>E</td><td>59 and Below</td></tr></table>	Grade	Percentage %	Grade	Percentage %	A	100-93	C	76-73	A-	92-90	C-	72-70	B+	89-87	D+	69-67	B	86-83	D	66-63	B-	82-80	D-	62-60	C+	79-77	E	59 and Below
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Attendance/ Tardiness	Regular class attendance and participation is the key to learning and being successful in mathematics. ABSENCES: ALL absences must be <u>excused</u> by the parent or guardian via note or phone call to my voice mail. In the event that quizzes or tests are missed, they MUST be made up within 2 days (only if absence is excused) either after school or during class if time permits. TARDIES: Students are allowed three tardies to class per semester, without disciplinary action. The following measures will be taken for subsequent tardies: Four Tardies: Referral to the office/detention. Eight and Ninth Tardies: Referral to the in-school suspension supervisor and each will result in a day of in-school suspension. Tenth Tardy: Referral to a principal for a principal/student conference and will result in an in-school suspension. Eleventh and Higher Tardies: Referral to a principal for a principal/student conference and a day out-of-school suspension for each subsequent tardy.																												
Classroom Rules and Procedures	<ul style="list-style-type: none">• Show Respect to myself, your peers, and for classroom properties: Refrain from getting out of your seat while I am talking. Do not talk at inappropriate times. Leave the classroom as you found it (or better). Do not put others down. Do not use profanity. Stay in your seat until the bell rings (no gathering while waiting for dismissal).• Be Responsible for your own actions and learning: Come to class on time, well rested and prepared, and use class time for math only.• Do you best at all times: Do your own work, strive for quality and take pride in what you do, and whatever happens, keep trying!• <i>All school rules from the student handbook apply in this classroom.</i>																												
Academic Integrity	<ul style="list-style-type: none">• All students must do their own work• Cheating or copying another student's work will not be tolerated• Any deviation from this will result in loss of credit for the particular work and a referral to the office for disciplinary action																												
Technology Usage	<ul style="list-style-type: none">• Scientific or Graphing Calculator: It is strongly recommended that students have a scientific calculator available for homework. There are several inexpensive models available (TI-30 is sufficient).• Cell Phone Calculators: Cell phones may NOT BE USED during class. Calculators will be provided.																												
Other Comments	Tutoring/After School Help: I am available for after-school help if an appointment is made in advance.																												