



Portland Public Schools  
Middle Level  
Syllabus Template

School Year 2011-2012

Teacher: Trish Bennett		School: Mt. Tabor Middle School	
Subject: Math	Course Title: Algebra 1-2	Grade Level(s): 9 <sup>th</sup>	
Is high school credit an option for this course? Yes			
Prerequisites:  This class is open to all 8 <sup>th</sup> graders and 7 <sup>th</sup> graders who score in or above the 95 <sup>th</sup> percentile on the Oregon State test.			
Course description: The course is structured around problems and investigations that build the conceptual understanding of algebraic topics and an awareness of connections between the different ideas. There are strong threads woven throughout the course on multiple representations and the meaning of a solution. Students will be asked to justify their thinking, generalize relationships, make connections between ideas and reverse thinking to solve problems. A major focus of Algebra 1-2 is to develop multiple strategies to solve problems and to recognize multiple ways of understanding concepts.			
Priority standards / Final Proficiencies: <ul style="list-style-type: none"><li><input type="checkbox"/> Solve linear equations with one or two variables.</li><li><input type="checkbox"/> Given a situation, identify the variables, write a linear equation and use the equation to solve the problem.</li><li><input type="checkbox"/> Given a linear relationship (pattern or situation, graph, table, equation), find the other three representations.</li><li><input type="checkbox"/> Given a situation, identify the variables, write a system of linear equations and use the equations to solve the related problem symbolically and graphically.</li><li><input type="checkbox"/> Interpret slope as rate.</li><li><input type="checkbox"/> Given a system of equations, choose an algebraic strategy (equal values, substitution, or elimination), solve and check the answer.</li><li><input type="checkbox"/> Given a point and slope, write a linear equation.</li><li><input type="checkbox"/> Given two points, write a linear equation.</li><li><input type="checkbox"/> Solve linear inequalities with one variable.</li><li><input type="checkbox"/> Solve one and two variable linear inequalities by graphing.</li><li><input type="checkbox"/> Find the solution to a given proportion with one variable.</li><li><input type="checkbox"/> Given a proportional situation write then solve a proportion.</li><li><input type="checkbox"/> Given a quadratic equation, make a table of values and a graph to represent it.</li><li><input type="checkbox"/> Solve quadratic equations by factoring and using the quadratic formula.</li><li><input type="checkbox"/> Given a quadratic equation, identify the x-intercepts (roots) and y-intercepts without graphing.</li><li><input type="checkbox"/> Evaluate variable expressions with integer exponents.</li><li><input type="checkbox"/> Simplify expressions with integer exponents using laws of exponents.</li></ul>			

Schedule of topics/units covered:	
Problem Solving Graphs and Equations Multiplication and Proportions Linear Relationships Inequalities	Variables and Proportions Multiple Representations Systems of Equations Quadratics Simplifying and Solving
Academic Vocabulary	
Refer to the <u>CPM Algebra Connections</u> text.	
District adopted materials	
College Preparatory Mathematics: Algebra Connections	
Supplemental resources:	
TI-84 graphing calculator, <a href="http://WWW.cpm.org">http://WWW.cpm.org</a> , <a href="http://www.hotmath.com">http://www.hotmath.com</a> , <u>Algebra Connections: Parent Guide</u> , <u>Algebra Connections: Extra Practice (Skillbuilders)</u>	
Differentiation/ accessibility strategies and support (TAG, ELL, SpEd, other):	
<ul style="list-style-type: none"> <li>○ Groupwork</li> <li>○ Tutoring</li> <li>○ Accessibility strategies #1-10 and 12-15.</li> </ul>	
Final proficiencies: See above.	
Essential skills to be taught or assessed:	
<input type="checkbox"/>	<input type="checkbox"/> Read and comprehend
<input type="checkbox"/>	<input type="checkbox"/> Write clearly and accurately
<input type="checkbox"/>	<input type="checkbox"/> Listen actively and speak clearly
<input type="checkbox"/>	<input checked="" type="checkbox"/> Apply mathematics
<input type="checkbox"/>	<input checked="" type="checkbox"/> Think critically
<input type="checkbox"/>	<input checked="" type="checkbox"/> Personal management and teamwork
<input type="checkbox"/>	<input checked="" type="checkbox"/> Use technology
<input type="checkbox"/>	<input type="checkbox"/> Civic and Community Engagement
<input type="checkbox"/>	<input type="checkbox"/> Global Literacy
Assessment/evaluation/grading policy:	
Students must demonstrate proficiency on learning objectives through completion of homework, assignments, projects and scores on quizzes and tests.	

Behavioral expectations: Students will be expected to work independently and collaboratively in study groups. Homework is required in this class.

Safety issues and requirements: None.

Signature of instructor completing this form:  
Trish Bennett

Administrator Approval:

*By approving this syllabus the administrator verifies that*

- a. the course code written on this form is accurate and that this code has been correctly placed into eSIS by the school's data clerk.*
- b. the teacher listed on the syllabus meets the endorsement requirements as set forth by ODE and NCLB.*
- c. the course meets the requirements of the District required core curriculum including standards.*
- d. the teacher is using District adopted materials or has been approved to use other resources.*