## **Chemistry Syllabus 2016-2017**

## Mr. A. Piccolo, N260

Week	Topic/Unit	Coursework and	Expectation(s)
	• '	Assignments Due	Met
1	<ul> <li>Welcome</li> <li>Introduction to course and chemistry</li> <li>General review of basic principles</li> <li>Laboratory Safety</li> </ul>	~ Read and sign letters ~ Read Chapters 1 and 2 ~ Complete Vocabulary ~ Vocabulary Quiz ~ Measurement Laboratory ~ Significant figure and scientific notation quiz	<ul> <li>Effective Reader</li> <li>Respectful Person</li> <li>Collaborative and</li> <li>Cooperative Worker</li> <li>Self-Directed Learner</li> </ul>
2-3	Atomic Structure	~ Read Chapter 3   ~ Atomic Theory Timeline Project   ~ Complete Vocabulary   ~ Atomic Structure Quiz   ~ Vegium Lab Activity   ~ Pg. 86-89 #s 3,6,7,14,16,22   ~ Atomic Structure Test	<ul> <li>Effective Reader</li> <li>Collaborative and         <ul> <li>Cooperative Worker</li> </ul> </li> <li>Effective Problem Solver</li> <li>Self-Directed Learner</li> </ul>
4-5	Atomic Structure and Arrangement of Electrons	~ Read Chapter 4   ~ Complete Vocabulary   ~ Vocabulary Quiz   ~ Flame Test Lab Activity   ~ Element Poster Project   ~ Electron Configuration Quiz   ~ Pg. 117-121   #s 22,23,24,27,28,30   ~ Electron Configuration Test	<ul> <li>Effective Reader</li> <li>Collaborative and         <ul> <li>Cooperative Worker</li> </ul> </li> <li>Effective Problem Solver</li> <li>Self-Directed Learner</li> </ul>
6-7	Periodic Table and Periodic Trends	~ Read Chapter 5 ~ Complete Vocabulary ~ Vocabulary Quiz ~ Periodic Table Lab Activity ~ Periodic Table Quiz ~ Density Trend on the Periodic Table Lab Activity ~ Pg. 155-159 #s 2,4,14,17,18,20,23,33 ~ Periodic Table Test	<ul> <li>Effective Reader</li> <li>Collaborative and         <ul> <li>Cooperative Worker</li> </ul> </li> <li>Effective Problem Solver</li> <li>Self-Directed Learner</li> </ul>
8-10	Chemical Bonding	~ Read Chapter 6 ~ Complete Vocabulary ~ Vocabulary Quiz ~ Molecular Model Lab Activity ~ Chemical Bonding Quiz ~ Pg. 194-199 #s 2,11,15,18,22,35,37,38a-c ~ Chemical Bonding Test	<ul> <li>Effective Reader</li> <li>Collaborative and         <ul> <li>Cooperative Worker</li> </ul> </li> <li>Effective Problem Solver</li> <li>Self-Directed Learner</li> </ul>
11-15	Chemical Composition and Chemical Formulas	~ Read Chapter 7  ~ Complete Vocabulary  ~ Vocabulary Quiz  ~ Nomenclature Quiz  ~ Percentage Oxygen in KClO <sub>3</sub> Lab  ~ Empirical Formula of a Compound Lab  ~ Perentage Composition Quiz  ~ Determining Empirical and Molecular	<ul> <li>Effective Reader</li> <li>Collaborative and         <ul> <li>Cooperative Worker</li> </ul> </li> <li>Effective Problem Solver</li> <li>Self-Directed Learner</li> </ul>

**School-Wide Student** 

The students, faculty, staff, and administration of Wilby High School will work cooperatively with families, members of the community, and the Board of Education to create a safe, welcoming, and academic environment which embraces, challenges, and nurtures the diverse talents, interests, and learning styles of all its students. All students will leave Wilby High School with self-respect, respect for others, knowledge, and 21<sup>st</sup> century skills necessary to become independent, intellectually curious, and self-fulfilled members of society.

T		D= 224 220	
		~ Pg. 234-239	
		#s 3,4,7,10,26,33,34,36, 37,38 Due 1/9/12	
		~ Chemical Composition and Chemical	
16.10	Cl : IF ::	Formulas Test ~ Read Chapter 8	• Effective Deciler
16-19	Chemical Equations		❖ Effective Reader
	and Reactions	~ Complete Vocabulary	❖ Collaborative and
		~ Vocabulary Quiz	Cooperative Worker
		~ Balancing Equations Quiz	Effective Problem Solver
		~ Classifying Reactions Quiz	<ul> <li>Self-Directed Learner</li> </ul>
		~ Precipitation in Double Replacement	
		Reactions Lab	
		~ React and Balance Quiz	
		~ Pg. 269-273	
		#s 3,18,20,21,25,30,37,45,46	
		~ Chemical Equations and Reactions Test	
20-23	• Reaction	~ Read Chapter 9	❖ Effective Reader
	Stoichiometry	~ Complete Vocabulary	<ul> <li>Collaborative and</li> </ul>
		~ Vocabulary Quiz	Cooperative Worker
		~ Mass and Mole Relationships in Chemical	Effective Problem Solver
		Reactions Lab	<ul> <li>Self-Directed Learner</li> </ul>
		~% NaCl/KClO₃ in a mixture Lab	
		~ Stoichiometry Quiz	
		~ Pg. 295-299	
		#s 2,5,6,10,11,17,26	
		~ Stoichiometry Test	
24-26	<ul> <li>Gas Laws</li> </ul>	~ Read Chapter 10	<ul> <li>Effective Reader</li> </ul>
		~ Complete Vocabulary	<ul> <li>Collaborative and</li> </ul>
		~ Vocabulary Quiz	Cooperative Worker
		~ Boyle's Law Lab Activity	Effective Problem Solver
		~ Charles' Law Lab Activity	<ul> <li>Self-Directed Learner</li> </ul>
		~ Gas Laws Quiz	
		~ Pg. 326-331	
		#s 1,2,5,7,12,18,19,21,26,29,32,33	
		~ Gas Laws Test	
27-29	<ul> <li>Liquids and Solids</li> </ul>	~Read Chapter 12	Effective Reader
		~Complete vocabulary	<ul><li>Collaborative and</li></ul>
		~Vocabulary quiz	Cooperative Worker
		~Phase Change Lab	Effective Problem Solver
		~LeChatelier's Principle Lab	<ul> <li>Self-Directed Learner</li> </ul>
		~Pg. 388-390	
		#s 1,2,6,9,13,27,34,35,36,37	
		~Liquids and Solids test	
30-33	<ul> <li>Solutions</li> </ul>	~Read Chapter 13	<ul> <li>Effective Reader</li> </ul>
		~Complete Vocabulary	<ul> <li>Collaborative and</li> </ul>
		~Vocabulary quiz	Cooperative Worker
		~Kool-Aid Lab	<ul> <li>Effective Problem Solver</li> </ul>
		~Molarity quiz	Self-Directed Learner
		~Dilution Lab	• Sell-Directed Learner
		~Pg. 420-422	
		#s 4,5,6,7,10,15-20,23-25,28-30	
		Solutions Test	
34-	<ul> <li>Acids and Bases</li> </ul>	~Read Chapter 15	<ul> <li>Effective Reader</li> </ul>
		~Complete vocabulary	<ul> <li>Collaborative and</li> </ul>
		~Vocabulary quiz	Cooperative Worker
		~Indicator Lab	* Effective Problem Solver
		~Pg. 477-479	Self-Directed Learner
		#s 1-5,8,11,13,14,26,31	→ Sen-Directed Learner

The students, faculty, staff, and administration of Wilby High School will work cooperatively with families, members of the community, and the Board of Education to create a safe, welcoming, and academic environment which embraces, challenges, and nurtures the diverse talents, interests, and learning styles of all its students. All students will leave Wilby High School with self-respect, respect for others, knowledge, and 21<sup>st</sup> century skills necessary to become independent, intellectually curious, and self-fulfilled members of society.