



## Hansen Jr/Sr High School Curriculum Map Chemistry

**Course Overview: Students will be prepared to enter college chemistry with all the background needed to perform successfully in college chemistry.**

<b>Week</b>	<b>Unit/Chapter/Topics</b>	<b>Resources</b>	<b>Standards</b>
1-2	Introduction scientific Method, SYSTEMS	<i>Internet, books, PowerPoint, Videos</i>	<b>ETS1.BPSC2-HS-3, PSC3-HS-4, PSC3-HS-5</b>
3-4	Mixtures, solutions, heterogeneous and homogenous mixtures, elements compounds, Fractional crystallization, a distillation of oil breaking it down.	<i>Internet, books, PowerPoint, Videos</i>	<b>ETS1.BPSC2-HS-3, PSC3-HS-4, ETS1.B</b>
5-7	Chemical And physical changes, Calories= Kilocalories, vs calories and caloric values.	<i>Internet, books, PowerPoint, Videos</i>	<b>LS4.D, ETS1.B</b>
8-9	Specific Heat, endothermic	<i>Internet, books, PowerPoint, Videos</i>	<b>PS3.B, PS3.D, PSP1-HS-6PSC3-HS-5, PSC3-HS-3</b>

	and exothermic reaction. Calorimeter lab. Conservation of energy the laws of energy.		
<b>10-12</b>	Robert Boyle, newtons laws, Antoine Lavoisier, Joseph Proust, Dalton Conservation of mass and definite proportions, JJ Thompsons, plum pudding  model	<i>Internet, books, PowerPoint, Videos</i>	<b>PS3.B, PS3.D, PSP1-HS-6, PSC3-HS-5, PSC3-HS-3, PSC4-HS-4</b>
<b>13-15</b>	The Atom and its subatomic particles, Hadrons, Leptons, Antiparticles, etc. the particle accelerator	<i>Internet, books, PowerPoint, Videos</i>	<b>PSC1-HS-1, PS1.A, PS3.A</b>
<b>16-18</b>	Nuclear decay fusion, fission, spectroscopy, electromagnetic energy, the energy emitted by gaseous, works by Bohr, Planck, DeBroglie	<i>Internet, books, PowerPoint, Videos</i>	<b>PSC-HS-2, PSC1-HS-4</b>
<b>19</b>	<b>Finals</b>	<i>Internet, books, PowerPoint, Videos</i>	
<b>20-24</b>	The Periodic Table of elements, How to read the table, Electron configurations, and the Lewis dot diagram. Students will	<i>Internet, books, PowerPoint, Videos</i>	<b>PSC1-HS-1, PSC1-HS2</b>

	know the names and symbols of the elements		
		<i>Internet, books,PowerPoint,Videos</i>	
<b>25-36</b>	Significant digits, scientific notation, Stoichiometry, mole to mole problems, the heat of enthalpy balancing equations, writing an equation, ionic bond, covalent bonds, percentage yield, empirical and molecular formulas,	<i>Internet, books,PowerPoint,Videos</i>	<b>ETS1.BPSC2-HS-3, PSC3-HS-4, PSC3-HS-5, PSC1-HS-1, PSC1-HS2</b>
		<i>Internet, books,PowerPoint,Videos</i>	
		<i>Internet, books,PowerPoint,Videos</i>	