Hansen Jr/Sr High School Curriculum Map
Physical Science

Course Overview: Students will understand the basic formulas and concepts of chemistry and physics.

Week	Unit/Chapter/Topics	Resources	Standards
1-2	Introduction what is a system, and the Scientific Method, what is physical science, technology, units of measure used in science, significant digits, Scientific notation.	*Internet, textbooks, PowerPoints, and videos.*	PS3.B,PS3.D
3-5	Motion and energy, speed, force, kinetic, potential energy, work, centripetal force, Gravity, and gravitational force, momentum, and all formulas associated with these. Newtons laws of energy	*Internet, textbooks, PowerPoints, and videos.*	PSC3-HS-2,PSCH3-3, PSC3-HS-4 PSC-HS-5, PSP1-HS-4 PSP2-HS-2
6-9	The rollercoaster project, students will design a roller to scale using all the formulas for work, centripetal force, terminal velocity, acceleration, kinetic, and potential energies. This project incorporates all the formulas, and laws of motion and energy.	*Internet, textbooks, PowerPoints, and videos.*	PSC3-HS-2,PSCH3-3, PSC3-HS-4 PSC-HS-5, PSP2-HS-2

10-12	How energy is transferred, specific heat, and the formulas associated with specific heat, thermal heat, Students will build a calorimeter, to show qualitative evaluations.	*Internet, textbooks, PowerPoints, and videos*	**PSC3-HS-4, PSC3-HS-5,**
13-15	The magnetic unit, how they incorporate magnets in today's society by putting them in autos, computers, speakers, phones, submarines, airport security, store anti-theft, students will have a project building a device with magnets.	*Internet, textbooks, PowerPoints, and videos*	**Ps3.a,PS3.B3 ps3.c,**
16-18	Electricity, the history of electricity along with devices that have changed our world, formulas associated with electricity, a/c and d/c power. Students will also build a device that incorporates the electricity of their choice	*Internet, textbooks, PowerPoints, and videos*	**PSP.3A, PS3.B,**
19	Finals		
20-22	Matter and the states of matter and properties associated with each state of matter. Properties of supercooling, sublimation, Boyle's law, Charles's law, Archimedes principle, Bernoulli's principle, along with several other laws.	*Internet, textbooks, PowerPoints, and videos*	**PS1.A, PSC1-HS-1, PSC-HS-3**
23-25	Waves, transverse waves associated with electromagnetic radiation, compressional waves associated with sound waves	*Internet, textbooks, PowerPoints, and videos*	**PSP3-HS, PSP-3HS-1, PSP3-HS-3, PSP3-HS-4, PSP3-HS-5**
26-29	Periodic Table of Elements, students will be able to interpret the table and the different types of elements in the families and	*Internet, textbooks, PowerPoints, and videos*	**PSC1-HS-5, PS1.A, PS1.C, PSC1-HS-1P SC1-HS-2,PSC1-HS3,PSC1-HS-5**

	periods. The students will be able to break the atom down into its subatomic structure, the quarks and so forth.		
30-33	The nuclear power unit, Types of nuclear power, used in powerplants, Students will build a model of a nuclear plant and present it to class peers.	*Internet, textbooks, PowerPoints, and videos*	**PSC1-HS-1P SC1-HS-2,PSC1-HS3,PSC1-HS-5**
34-35	Students choice, of any unit in physical science not taught during the year	*Internet, textbooks, PowerPoints, and videos*	**TBD**
36	**Final**	*Internet, textbooks, PowerPoints, and videos*	