Physic I & II Curriculum Map

	August	September	October	November
Essential Questions		How can motion be quantitatively measured?	How can Newton's Laws be used to predict motion?	How the laws of conservation be used to predict motion?
Content in terms of essential concepts and topics		Displacement, velocity, acceleration, kinematics' equations	Force, Newton's Laws, centripetal force, types of energy	Conservation laws, statics
Standards/skills (i.e., processes and skills emphasized—State Academic Standards, and MCSC skills)	Standards 1.2 and 1.4 are addressed throughout the entire course	1.5 and 1.6	1.5,1.6, 1.7, 1.8, 1.10, 1.11, 2.1, 2.2, 2.3	1.3, 1.13, 1.27, 1.28
Products/Assessments It is assumed that students will be assessed with traditional tests.		Velocity vs. Time Lab	G*sin(theta)* lab, centripetal acceleration lab	Specific heat lab, latent heat lab
Resources	Include textbook, and lab investigations, teacher directed demonstrations throughout the year			

May 2005

	December	January	February	March
Essential Questions	How can the conservation energy be used to predict temperature?	How can the field concept be used to predict the motion of electrical charges?	How can Ohm's Law be used to predict the power produced by moving electrical charges?	
Content in terms of essential concepts and topics	Simple harmonic motion, heat, ideal gas laws	Coulomb's law, electric field	Electric potential, Ohm's Law	Ohm's Law, magnetic field induction
Standards/skills (i.e., processes and skills emphasized—State Academic Standards, and MCSC skills)	1.3, 1.13, 1.27, 1.28	1.1, 1.10, 1.13, 1.17, 1.18	1.11,1.19, 1.18	1.18, 1.19, 1.20, 1.21, 2.4
Products/Assessments It is assumed that students will be assessed with traditional tests.	Counting Electrons Lab		Ohm's Law Lab	Lens and Mirror Lab
Resources	Include textbook, and ancillary materials, teacher directed demonstrations			

	April	May		
Essential Questions	How can the dual nature of light be used to describe image formation and interference patterns?	How can various models be used to describe the structure of the atom?		
Content in terms of essential concepts and topics	Reflection, Snell's Law, mirrors, lenses, waves nature of light	Modern physics, atomic structure		
Standards/skills (i.e., processes and skills emphasized—State Academic Standards, and MCSC skills)	1.22, 1.23, 1.24, 1.25. 1.26	1.1, 1.29, 1.30, 1.31, 1.32, 1.33, 1.34, 1.35, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10		
Products/Assessments It is assumed that students will be assessed with traditional tests.	Lens and mirror lab	End of the year sequence lab		
Resources	Include textbook, and ancillary materials, teacher directed demonstrations			MGD 5/05