AP Physics Curriculum Map

	August	September	October	November
Essential Questions	What is motion?		What are Newton's Laws of motion? What is a gravity field?	
Content in terms of essential concepts and topics	Vectors	Displacement Velocity Acceleration Kinematic Equations (two sets)	Force –linear and centripetal **F = ma**	
Standards/skills (i.e., processes and skills emphasized—State Academic Standards, and MCSC skills)	1.27 → 1.4 →	1.5, 1.6	1.5,1.6, 1.7, 1.8, 1.10, 1.11, 2.1, 2.2, 2.3	1.9, 1.12, 1.14, 1.15, 1.16, 2.7
Products/Assessments It is assumed that students will be assessed with traditional tests.	Computer Generated Velocity vs. Time Experiment	Compare computer sensors to air track	Momentum Rotational Motion	Coffee filter velocity equation Atomic mass (heat capacity)
Resources	Include textbook, and lab investigations, teacher directed demonstrations throughout the year			

May 2005

	December	January	February	March
Essential Questions	What is energy conservation? ⟶		What is current, an electric charge? ⟶	
		What is an electric field, what is a static electric charge ?		What is Ohm's Law? What is a magnetic field?
Content in terms of essential concepts and topics	Conservation Laws 1. Mass 2. Energy 3. Electrical charge Harmonic Motion	Coulomb's law Voltage Capacitance		**V=IR** **B⇔I** (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	1.8, 1.9, 1.20,
Products/Assessments It is assumed that students will be assessed with traditional tests.	Physical pendulum Spring constant Gamma Constant	Radiation	Time Constant e/m ratio	Phase angles (ac)
Resources	Include textbook, and ancillary materials, teacher directed demonstrations			

	April	May		
Essential Questions	(Continue) What is Ohm's Law? What is a magnetic field? What is light?			
Content in terms of essential concepts and topics	Snell's Law Waves and Rays Interference (+/-)			
Standards/skills (i.e., processes and skills emphasized—State Academic Standards, and MCSC skills)	1.22, 1.23, 1.24, 1.25. 1.26, 1.21			
Products/Assessments It is assumed that students will be assessed with traditional tests.	Speed of Light	Combination of Lenses		
Resources	Include textbook, and ancillary materials, teacher directed demonstrations			MGD 5/05