Maine **(Proposed New Standards / 2006)** **High School**	**Starry Night Lesson Plans** *In order of relevance*
D. THE PHYSICAL SETTING - Students will understand the universal nature of matter, energy, force and motion, and will be able to identify how these relationships are exhibited in Earth Systems, in the solar system and throughout the universe. **GRADES 9-12** **D1 UNIVERSE AND SOLAR SYSTEM**	All Starry Night lesson plans
Students will explain the physical formation and evolution of our universe and solar system, and how our past and present knowledge of the universe and solar system developed.	All Starry Night lesson plans
Use the speed of light to express relative distances to objects in the universe.	G1-G3 H1-H3 I3
Explain the role of gravity in forming and maintaining planets, stars, and the solar system.	F3 B1 C2 G3
Outline the age, origin and evolution of the universe as currently understood by science.	H1-H3 I3
D2 EARTH	
Students will analyze the biological, physical and human interactions that shape and alter earth's systems	F1 A3 F2
Explain how solar radiation, ocean currents, and atmospheric conditions influence the sustainability of life on Earth.	F1 A3 F2
D3 MATTER AND ENERGY	
Students will describe the structure, behavior, and interactions of matter at the atomic level and the relationship between matter and energy	F1
Describe nuclear reactions and the energy they release.	F1
D4 FORCE AND MOTION	
Students will understand that the laws of forces and motion across the universe.	C2 F3 G3 H1-H3 I1-I3
Describe the intellectual developments that have led to our present understanding of the universe structure and motion.	C2 F3 H1-H3 I1-I3
Describe Newton's concept of universal gravitation, using the motion of galaxies, stars, planets, moons, comets, and various events on Earth as examples.	C2 B1 D1-D3 G1 G3 I2
Describe the idea of an expanding universe and the concept used by scientists to explain it.	H1-H3 I3
Describe the contribution of Newton to our understanding of force and motion, and give examples of his three laws of motion.	C2
Explain the ideas of relative motion and frame of reference.	C1-C3 G1 G3 H1-H3 I3
Explain the relationship between stars and nuclear energy.	F1 G2