

PHYS 150: Heaven and Earth: A First Synthesis

The physics of motion on earth and in the heavens is traced from ancient Greek times through the Dark and Middle Ages, to the Renaissance and Galileo, and to Newton and the Enlightenment. Humanistic, cultural, and historical perspectives are emphasized as is the scientific method/process. Science is shown to be inextricably linked to other human endeavors such as religion, art, politics, music, literature, philosophy, and commerce. High school knowledge of algebra, geometry, trigonometry, and scientific notation would be helpful. Concurrently, we will explore physics after Newton and up to the contemporary frontier of string/brane theory, covering topics such as relativity and quantum mechanics and utilizing modern physics labs.

Units: 3

Program: PhysicsPhysical Science