

### **Assignment #1. Pre-20th Century Physics**

1. How does Newton's concept of natural motion differ from Aristotle's?
2. How does Aristotle explain the observed retrograde motion of the planets?
3. What is an inertial reference frame in Newton's theory of motion? What is the Newtonian Relativity Principle?
4. How are inertial frames related to each other in Newton's theory of motion? How are they related in Maxwell's theory of motion (i.e., electrodynamics)?
5. In Newton's theory of motion, how are accelerated reference frames observationally distinct from inertial frames?