Humanities 4: Lecture 2

The Scientific Revolution

Pre-Modern Science

- Aristotelian Science

-paradigm: biology and (astronomy and theology)

-qualitative explanations and final causes

-geocentric astronomy

- The Language of God

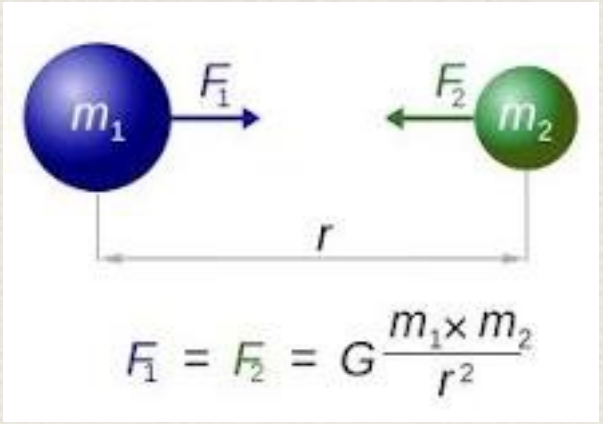
-Biblical narrative is crucial to decipher God's intentions

-man at the center of the universe

-made in the image of a perfect God, but imperfect

Scientific Revolution

- Science seeks laws of nature which are
  - -mathematical and precise
  - -certain
  - -explanatorily powerful (efficient causes).
- Examples
  - -Newton's three laws of motion (inertia, F=ma, action = reaction)
  - -Newton's law of universal gravitation)
  - -Boyle's ideal gas law (p*v=K)



Significance of Sc. Rev.

- Major shifts

-math and physics, not biology or theology, is paradigm science

-explanations are quantitative, not qualitative

-only efficient causes remain

-heliocentric astronomy

-laws of nature/motion

- Mathematics is the language of nature (and God)
- Importance of Laws of Nature

-isolate individuals with their intrinsic properties

-find laws to govern their interactions