## HON 120 - First Draft

**Terms** Magnetic Force People **Major Concepts** Aether Matter 3rd Earl of Rosse (William Parsons) Big Bang Albert Einstein Colors and Flavors of quarks Baryon Meson Neutrino Alexander Friedmann Cosmological Principle Bending of Light Beta Decay Neutron Archimedes of Syracuse Curved Space Big Bang Newtonian Gravity Aristotle Doppler Effect Black Holes Open Universe Arno Penzias Equivalence Principle Parallax Christian Doppler **Expanding Universe** Blackbody Photon Claudius Ptolemy Fate of the Universe Closed Universe Cosmic Background Radiation Pion Edwin Hubble Fixed Speed of Light Cosmic Triangle Proton General Theory of Relativity Eratosthenes of Cyrene OCD Erwin Schrodinger Gravitation Cosmology Critical Density of Universe Quantum Loop Gravity Fred Hoyle How did the Doppler Effect help explain expansion of universe? Galileo Galilei How is dark matter detected? Curvature Ouark Curved Space Red shift James Clerk Maxwell How many stars and galaxies are there? Dark Matter Reflecting telescope Johannes Kepler How old, large is universe? Dark Matter Relativity Karl Schwarzschild Inflationary Model Dimensions Scientific theory Louis de Broglie Newton's Laws of Motion Singularity Max Planck Doppler Effect Special Theory of Relativity  $E=mc^2$ Sound waves Neils Bohr Speed of Light Electical Force Space Nicolaus Copernicus Standard Model Electromagetism Space-Time Ptolemy (Claudius Ptolemaeus) Steady State Model of the Universe Electromagnetic Waves Special relativity Pythagoras of Samos The Expanding Universe

**Expanding Universe** Spectral Lines Richard Feynman The Four Forces of the universe (E&M, weak, strong, gravitational)

What is classical vs modern physics?

Fission Robert Wilson The three possible curvatures of our universe Spectroscopy Frame of Reference The three possible scenarios of our universe Speed of light Sir Isaac Newton Standard Model Fusion

Stephen Hawking Timeline of the Big Bang Model

What contribute to the total matter-energy density? Galaxy Star Steven Weinberg Werner Heisenberg

Steady State Model Geocentric Geodesic String Theory Gluon Strong Force

Gravitation Telescope (Evolution/creation)

Static Universe

Heliocentric The Four Dimensions The Twin Paradox **Hubble Constant** 

Hubble's Law Time

General Relativity

Time Dilation Inertia Isotropic **Uncertainty Principle** Laws of Motion Uniform distribution

Lepton Wave

Light Spectrum Wave Diffraction Wave-particle duality Light Spectrum Shift

Light Years Wavelength Weak Force Luminosity