Astro 105 Exam III Study Guide

Topics (not exhaustive, but covers the most important material)

Accelerated Expansion Age of universe (and the details) Alan Guth **Big Bang Theory** Big Crunch Blazars Clusters, Superclusters Cosmic Horizon Distance Cosmic Microwave Background Radiation (CMBR) Cosmological Constant Cosmological Redshift Cosmology Dark energy Dark matter Doppler Redshift Edwin Hubble Electromagnetic force **Electroweak Theory** Flat Universe Four fundamental forces Galactic collisions Gamma-Ray Bursts General Relativity (GR) theory, equation, and terms Gravity force High Energy Physics, Length Scales Hubble flow Hubble's Constant and Law Inflation Lawrence Krauss Local Group Matter-dominated and Radiation-dominated universe Neutron Decay Planck's Formula Quasars Quintessence **Radio Galaxies** Recessional velocity

Richard Feynman, Feynman Diagrams Special Relativity's Constraint on Fluctuating Objects Steven Weinberg Strong force Superstrings and Brane Theory Tully & Fisher's relation and law Vacuum energy Wavelength Rule of Light Weak force