Astro 100 Exam III Study Guide

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

Astro-Metric Method for Extrasolar Planet Detection
Basic Requirements for Life
Big Bang Theory
Black Hole
Center-of-Mass (CM) Point of Solar System
Charles Darwin
Chromosphere
Convection Zone
Corona
Cosmic Microwave Background Radiation (CMBR)
Doppler Shift Method for Extrasolar Planet Detection
Drake Equation
$E = mc^2$
Einstein
Electroweak Era
Equivalence Principle
Fossil Record (age of life on Earth)
Four Forces (Strong, Electromagnetic, Weak, and Gravity)
Frank Drake
Frost Line
General Relativity
Helioseismology
Hydrostatic Equilibrium (balance of forces)
Karl Schwarzschild
Kelvin and Helmholtz's Gravitational Contraction of Sun
Life in Our Solar System (and likely candidates)
Mass of Extrasolar Planet
Mayor and Queloz
Miller-Urey Experiments
Neutrinos
Neutrons
Newton's Law of Gravity
Nuclear Fusion and Fission
Number of Extrasolar Planets
Obtaining the Mass of the Sun
Penzias and Wilson
Photon Scattering in the Sun
Photons (quantum particle of light)
Photosphere

Photosynthesis: Base of Food Chain
Planck Era
Proton-Proton Chain (all the details)
Protons
Quarks
Radiation Zone
Radius of Extrasolar Planet
Ray Davis Solar Neutrino Experiment
Shift in Perihelion of Mercury's Orbit
Solar Flux at Earth
Spacetime
Sun's Composition
Sun's Density
Sun's Energy Source (viewpoint of ancient philosphers, late 1800's, and today)
Sun's Self-Regulation of Fusion Rate
Sun's Temperature on Photosphere
Sun's Temperature at the Core
The 3 Global Geometries of Curved Space
Transit Motion of Extrasolar Planet
Worldline
Wormhole