

## **Astro 100 MW Exam II Study Guide**

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

Accretion  
Asteroid collision rates  
Asteroids  
Atmospheres of the Jovians  
Bulk density (mass/volume)  
Ceres  
Clouds of Jupiter and Saturn  
Comet structure (nucleus, coma, tails)  
Comets  
Compositions of Jovians  
Conditions for liquid water  
Core  
Coriolis effect  
Crust  
Densities of common materials (water, rock, metal/iron)  
Differential rotation (Jovians)  
Differentiation  
Dwarf planets  
Earth's atmosphere  
Elements of the universe (initial and produced later)  
Eris  
Exosphere  
Flattening  
Frost line  
Galilean moons of Jupiter  
Gravitational contraction (as an energy source)  
Great Red Spot  
Greenhouse effect  
Greenhouse gases  
Heating  
Hydrogen compounds (ammonia, methane, etc.)  
Immanuel Kant  
Iridium  
Jovian formation  
Kepler's laws (notably, the 3rd law)  
KT boundary layer  
Kuiper Belt Objects (KBOs)  
Lithosphere  
Loss mechanisms of atmospheric gases (5)  
Luis Alvarez

Mantle  
Mars' seasons  
Mars' atmosphere  
Mars' surface features  
Mechanisms for geological re-surfacing (4)  
Mechanisms for internal heating (3)  
Mechanisms for planetary cooling (3)  
Mercury's atmosphere  
Mercury's surface features  
Meteorites (characteristics)  
Moon's surface features  
Oort Cloud  
Ozone (UV protection)  
Phases of hydrogen (Jupiter)  
Physics of light scattering (effects of coloring the skies of planets)  
Planetary geology  
Pluto  
Rings of Saturn  
Roche limit  
Seismic waves  
Shoemaker-Levy 9  
Solar nebular (and solar nebular theory)  
Sources of atmospheric gases (3)  
Spinning  
Stratosphere  
Terrestrial formation  
Thermosphere  
Titan  
Triton  
Troposphere  
Tunguska Siberia  
Venus' atmosphere  
Venus' surface features