Astro 101: Final exam topics / potential questions

NO NOTES are allowed. You need to bring a working red flashlight, your Planisphere, and your Astrolabe to the exam. The most effective way to study for the multiple-choice/short answer part of the final exam is to review all of the quizzes.

In addition to all of the topics from the Midterm Study Guide, concentrate on these areas:

• **ASTROLABE:**
  - Given a set position of the astrolabe (e.g. Spica setting) determine:
    - Altitude, azimuth of any object
    - Date of sunrise, sunset, beginning or end of civil, nautical, astrol twilight
    - Given the date, tell the (local solar) time

• **LATITUDE:**
  - Given zenith distance or altitude of the North Celestial, determine the latitude.
  - Given zenith distance or altitude of the Celestial Equator (or object on the CE), determine the latitude.
  - Given latitude, determine one of the following: ZD of CE, Alt of CE, ZD of NCP, Alt of NCP.

• **LONGITUDE:**
  - Given two of the following: longitude, Local Mean Time (LMT), Greenwich Mean Time (GMT), determine the third.
  - Be able to represent LMT, GMT, or longitude on a generic longitude diagram.

• **MOON PHASES:**
  - Be able to identify the eight phases of the moon in order.
  - Given a phase, state its elongation from the sun (east or west).
  - Given an orbital diagram of the moon with the sun's direction indicated, determine the moon's phase as seen from Earth.