Astro 101: Midterm topics / potential questions

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

• Working definitions of the following terms:

• Convert from local time to Eastern Time for East Lansing (memorize it)

• Sun’s RA and Dec for each of the equinoxes and solstices (memorize it)

• Approximate RA of Sun for any month interval (e.g. May 21, Nov 21, etc.)

• Correspondence of rising and setting points for celestial objects
  e.g., given a rising point, predict setting point.

• Approximate rising point, setting point, midday altitude of sun (fraction of the way from horizon to zenith) at equinoxes and solstices for East Lansing. (Similar to quiz 3 & 4.)

• Given two of the following three quantities, be able to find the third: Sidereal Time, Local Solar Time, RA of the sun. (Similar to quiz 3 & 4.)

• Where to generally find planets and the moon.

PLANISPHERE Using your Planisphere, be able to determine:

• Rising and setting positions of celestial bodies to nearest 16th of circle
  e.g., N, NNE, NE, ENE, E, etc.

• Local times of rising, setting, transiting of bodies throughout the year

• Approximate altitude and azimuth of celestial bodies
  to the nearest 5° using plastic grid

• Length of time object is above horizon

• Sun’s location (and constellation) on Planisphere at the equinoxes

• Sun’s rising or setting time at the equinoxes.