Astro 115 Exam 1 Study Guide
History Motions and Appearance of the Sky due to moving Earth

Reading: Ch1: section 1.3, Ch 2: sections 2.1, 2.2 & 2.3, Ch.3 section 3.1, plus handouts. (Looking over the homework will help too)

Exam will be about 30 questions and take about 25 minutes. Note: if you are late to class – too bad! You will have to take the test in the time that is left. Remember, no calculators or other electronics in the exam.

Constellations
What did ancient people use the sky for?
What is the International Astronomical Union definition of a constellation? What are the 3 sources of those constellations?
How many constellations are there?

Calendars
What are the reasons why do we not use straight solar or lunar calendars any more?
Know the rules for leap year in the Gregorian calendar and be able to use them, without a calculator.
Why do we have a leap year at all?

Celestial sphere
How do astronomers locate objects in the sky? Know the celestial coordinates (the equatorial system) and how they are defined
Know the meaning of the technical terms zenith, meridian, ecliptic, celestial poles and celestial equator.

Locations and motions
Sun height – Be able to know your location on Earth, based on your view of the Sun. e.g. Where would you have to be to see the Sun directly overhead?
What are the 3 motions of our planet? How are they caused? How long do they take?
Know the solstices and equinoxes and why they are called such
Why do we have seasons? What 2 seasonal effects make it hot in summer and cold in winter?
How much daylight do the poles get at different times of year and on what dates?
E.g. June 21st · Dec 21st

Moon Motions
Know the order of the phases of the Moon
Be able to recognize different phases from an image. How would you tell the difference between a waxing moon and a waning moon, just by looking at the shape?
Be able to recognize a phase of the Moon from its orbital position
Know the relationship between moonrise-time and phase. Where does the moon rise and set? What time does the new moon rise and set? What about a full moon?
What happens to get a total solar eclipse?
What moon phase do eclipses occur at?